

# ADOPTED RULES

Adopted rules include new rules, amendments to existing rules, and repeals of existing rules. A rule adopted by a state agency takes effect 20 days after the date on which it is filed with the Secretary of State unless a later date is required by statute or specified in the rule (Government Code, §2001.036). If a rule is adopted without change to the text of the proposed rule, then the *Texas Register* does not republish the rule text here. If a rule is adopted with change to the text of the proposed rule, then the final rule text is included here. The final rule text will appear in the Texas Administrative Code on the effective date.

## TITLE 1. ADMINISTRATION

### PART 2. TEXAS ETHICS COMMISSION

#### CHAPTER 10. ETHICS TRAINING PROGRAMS

##### 1 TAC §10.1

The Texas Ethics Commission (the Commission) adopts an amendment in chapter 10 of the Ethics Commission Rules. Specifically, the TEC adopts an amendment to rule §10.1 regarding Training Programs. The amended rule is adopted without changes to the proposed text as published in the April 25, 2025, issue of the *Texas Register* (50 TexReg 2539). The amended rule will not be republished.

State law requires state agencies to "review and consider for readoption each of its rules ... not later than the fourth anniversary of the date on which the rule takes effect and every four years after that date." Tex. Gov't Code §2001.039. The law further requires agencies to "readopt, readopt with amendments, or repeal a rule as the result of reviewing the rule under this section." *Id.* The TEC is authorized to adopt rules to administer Chapter 572 of the Government Code. Tex. Gov't Code §§ 571.061, .062.

The TEC is continuing its comprehensive review with a review of the TEC's rules regarding its ethics training programs, which are codified in Chapter 10.

The adopted amendments to Chapter 10 readopt the existing two rules, with one change to make clear a vote of the commissioners is not required to plan or host a training seminar. The current rules provide a framework for TEC create a plan to provide training on TEC laws and rules to the public. While the rules still serve a valid purpose, the TEC sees no need to codify into rule policies and plans related to training programs beyond the general framework in the current rule. Staff will work with the chair to make sure that the TEC provides the trainings that were recommended by Sunset Advisory Commission and authorized by law.

No public comments were received on this amended rule.

The amendment and re-adoption are adopted under Texas Government Code §571.062, which authorizes the Commission to adopt rules to administer Chapter 572 of the Government Code.

The adopted amended and readopted rules affect Chapter 571 of the Government Code.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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#### CHAPTER 12. SWORN COMPLAINTS

The Texas Ethics Commission (the Commission) adopts amendments to Texas Ethics Commission Rules in Chapter 12. Specifically, the Commission adopts amendments to §12.21 regarding Response to Notice of Complaint, §12.22 regarding Written Questions, §12.23 regarding Production of Documents During Preliminary Review, and §12.93 regarding Default Proceedings. The Commission also adopts new rules §12.27 regarding Discovery Control Plans, Application, §12.28 regarding Level 1 Discovery Control Plan, §12.29 regarding Level 2 Discovery Control Plan, and §12.30 regarding Requests for Disclosure. The amended and new rules are adopted with one change to the proposed text as published in the April 25, 2025, issue of the *Texas Register* (50 TexReg 2540). Section 12.28 will be republished. All other sections will not be republished. The only change is the deletion of an extra period at the end of a sentence in §12.28(5).

The Sunset Advisory Commission recommended several changes to the rules and procedures related to the sworn complaint process. The adopted amendments to Chapter 12 of the TEC rules implement those recommendations and make other changes to streamline the sworn complaint process and better protect respondents' rights in the process.

The adopted rules will do the following:

Repeal provisions that allowed for sanctions for failing to respond to a sworn complaint;

Impose a discovery control plan that mirrors the Texas Rules of Civil Procedure to limit the scope and duration of discovery;

Provide a clear procedure for a respondent to set-aside a default order, mirroring the procedure of the State Office of Administrative Hearings;

Repeal rules that allowed for the tolling of sworn complaint deadlines when written questions were submitted to a respondent but for which a response had not been received or when subpoenas were sought by TEC staff.

Although the Sunset review of the TEC sworn complaint files revealed no abuse of the discovery process, Sunset recommended that the TEC adopt discovery control plans to eliminate the po-

tential for abuse and ensure speedy resolution of cases. The adopted rules track the discovery control plans established in the Texas Rules of Civil Procedure and limits the amount and duration of the discovery period.

Deciding to self-impose limits on discovery in the sworn complaint process effectuates the recommendations of Sunset, should speed the resolution of cases, but also result in more preliminary review hearings. The adopted repeal of rules allowing for the tolling of deadlines also conforms TEC practice to a recent opinion of the Office of the Attorney General. Tex. Att'y Gen. Op. KP-0484.

No public comments were received on these amended rules.

## SUBCHAPTER C. INVESTIGATION AND DISCOVERY

### 1 TAC §§12.21 - 12.23

The amended rules are adopted under Texas Government Code §571.062, which authorizes the TEC to adopt rules to administer Chapter 571 of the Government Code. The TEC has additional authority to adopt rules regarding: (1) procedure in a formal hearing (§571.131), (2) technical and de minimis violations (§571.0631), and (3) procedures for preliminary review and preliminary review hearings (§571.1244).

The adopted rules affect Subchapter E of Chapter 571 of the Government Code.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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### 1 TAC §§12.27 - 12.30

The new rules are adopted under Texas Government Code §571.062, which authorizes the TEC to adopt rules to administer Chapter 571 of the Government Code. The TEC has additional authority to adopt rules regarding: (1) procedure in a formal hearing (§571.131), (2) technical and de minimis violations (§571.0631), and (3) procedures for preliminary review and preliminary review hearings (§571.1244).

The adopted rules affect Subchapter E of Chapter 571 of the Government Code.

§12.28. *Level 1 Discovery Control Plan.*

Discovery in a preliminary review under a Level 1 Discovery Control Plan is subject to the limitation provided elsewhere in this Chapter and to the following additional limitations:

(1) All discovery during a preliminary review must be conducted during the discovery period which begins when the initial response to the complaint is due and continues for 90 days.

(2) The discovery period reopens on the date the commission sets the matter for a formal hearing and continues for an additional 90 days.

(3) During a preliminary review, the respondent and commission staff may serve on any other party no more than 5 written interrogatories, excluding interrogatories asking a party only to identify or authenticate specific documents. If set for a formal hearing, each party may serve 10 more interrogatories. Each discrete subpart of an interrogatory is considered a separate interrogatory.

(4) During a preliminary review, the respondent and commission staff may serve on any other party no more than 5 written requests for production. If set for a formal hearing, each party may serve 10 more written requests for production. Each discrete subpart of a request for production is considered a separate request for production.

(5) During a preliminary review, the respondent and commission staff may serve on any other party no more than 5 written requests for admissions. If set for a formal hearing, each party may serve 10 more requests for admissions. Each discrete subpart of a request for admission is considered a separate request for admission.

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## SUBCHAPTER F. RESOLUTIONS

### 1 TAC §12.93

The amended rule is adopted under Texas Government Code §571.062, which authorizes the TEC to adopt rules to administer Chapter 571 of the Government Code. The TEC has additional authority to adopt rules regarding: (1) procedure in a formal hearing (§571.131), (2) technical and de minimis violations (§571.0631), and (3) procedures for preliminary review and preliminary review hearings (§571.1244).

The adopted rule affects Subchapter E of Chapter 571 of the Government Code.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## CHAPTER 18. GENERAL RULES CONCERNING REPORTS

### 1 TAC §§18.10, 18.21, 18.24

The Texas Ethics Commission (the Commission) adopts amendments to Texas Ethics Commission Rules in Chapter 18. Specifically, the Commission adopts amendments to §18.10 regarding Guidelines for Substantial Compliance for a Corrected/Amended 8-day Pre-election Report, §18.21 regarding Jurisdiction to Consider Waiver Request, and §18.24 regarding General Guidelines for Administrative Waiver or Reduction of Statutory Civil Penalties. The amended and new rules are adopted without changes to the proposed text as published in the April 25, 2025, issue of the *Texas Register* (50 TexReg 2543). The amended rules will not be republished.

About one year ago, the TEC drastically simplified its rules regarding waivers or reductions of civil penalties for late reports. The simplified rules have allowed TEC staff to more efficiently process waiver and reduction requests and has allowed filers to better understand their rights and obligations related to the fine waiver process. However, the TEC can further refine the rules to foster swift and just outcomes for waiver requests.

#### Background

The TEC is required to determine from "any available evidence" whether a report that is required to be filed with the TEC was filed late and assess a civil penalty if the report is late. Tex. Elec. Code § 254.042. This is a mandatory duty that is separate from the sworn complaint process. The civil penalty is set by statute at \$500 for most late reports, however the statutory civil penalty is \$500 for the first day late and \$100 each day thereafter until filed (up to \$10,000) for an 8-day pre-election report or the first semiannual report following an 8-day pre-election report. A corrected 8-day pre-election report is considered filed as of the date of correction if the correction is substantial. The TEC is required to determine whether a substantial correction was made to every corrected 8-day report.

By law, a filer may request in writing that the TEC waive or reduce a civil penalty for a report. The TEC adopted rules to apply to waiver requests. The rules are a mechanical determination based on the number of prior late reports by the filer and the amount at issue. A filer may appeal the determination under the rules to the full commission at a public meeting.

However, to be eligible to receive a waiver or reduction under the current rules, a filer must 1) make the request within 60 days of the deadline for the late report (unless good cause is shown for missing the deadline); 2) file all missing reports; and 3) pay any outstanding civil penalty that is not subject to a waiver or reduction request.

A reduced civil penalty not paid within 30 days reverts back to the original amounts.

#### Adopted Amendments

Extend the time to file a request for a waiver or reduction to 210 days.

It is common for candidates who lose their elections to close their P.O. boxes, stop checking campaign email, and cancel service to their campaign phone in a good-faith belief that their obligations as a candidate have ceased. However, an unsuccessful candidate needs to file at least one report after their election. In these cases, the filer may not receive notice of the late report be-

cause they have not updated their contact information with the TEC. Six months after the first missed semiannual report, the subsequent semiannual report will come due and the filer will once again be sent notice of a second late report. In several cases, for whatever reason, the filer became aware of the second late report and swiftly filed the missing reports. Under the current rules, that person was not be eligible for a waiver or reduction of the civil penalty for a \$10,000 fine for the first missed semiannual after the election. Extending the deadline to file for a waiver or reduction to 210 days will provide the person 30 days after the second late semi-annual to request a waiver or reduction. Extending the deadline will maintain some level of finality while also providing ample time to submit a waiver request.

Make 8-day correction "substantial compliance" determinations more generous.

By statute, if a person files a correction to an 8-day pre-election report even if the person swears the report was originally filed in good-faith, and that the report was corrected within 14 days of learning of the error and omission, the report is nevertheless considered filed late if the correction is substantial.

The law punishing corrections to 8-day reports is designed to prevent people from filing an incomplete report close to an election, only to correct it after the election and thereby avoid meaningful disclosure. However, in practice, many people who voluntarily correct reports originally filed in good faith receive substantial fines for having made the correction. In nearly all cases those fines are waived on appeal to the commission. The adopted amendments raise the monetary threshold before a correction will be considered substantial. If the dollar amounts of the corrections indicate that the correction is substantial under the adopted rule, then the Executive Director will determine whether there is reason to believe the report was originally filed in bad-faith, with the purpose of evading disclosure, or otherwise substantially defeated the purpose of disclosure and therefore was filed as of the date of correction. A review of the past approximately 50 corrections to late reports with substantial corrections under existing rules, raising the monetary threshold from \$3,000 to \$7,500 would reduce the number of reports considered filed late by 33 percent. The table below shows the effect of a raising the threshold dollar amount of a correction that would trigger a report being considered late to \$5,000, \$7,500, \$10,000, or \$15,000.

#### Figure: 1 TAC Chapter 18 - Preamble

The adopted rule change will allow for a swift determination and save filers the time, expense, and worry that they have a \$10,000 fine that can only be waived by the TEC commissioners.

No public comments were received on these proposed amended rules.

The amended rules are adopted under Texas Government Code §571.062, which authorizes the Commission to adopt rules to administer Title 15 of the Election Code and Chapter 571 of the Government Code.

The adopted amended rules affect Title 15 of the Election Code and Chapter 571 of the Government Code.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## CHAPTER 20. REPORTING POLITICAL CONTRIBUTIONS AND EXPENDITURES

### SUBCHAPTER A. GENERAL RULES

#### 1 TAC §20.1

The Texas Ethics Commission (the Commission) adopts an amendment in Chapter 20 of the Ethics Commission Rules. Specifically, the TEC adopts an amendment to rule §20.1 regarding the definition of principal purpose. The amended rule is adopted without changes to the proposed text as published in the April 25, 2025, issue of the *Texas Register* (50 TexReg 2545). The amended rule will not be republished.

A political committee is defined by state law as "two or more persons acting in concert *with a principal purpose* of accepting political contributions or making political expenditures." Tex. Elec. Code § 251.001(12) (emphasis added). The TEC defined the term "principal purpose" for the purpose of defining whether a group is a political committee. Tex. Elec. Code § 251.001(12). The existing rule states that a group has a principal purpose of accepting political contributions or making political expenditures if 25 percent of its incoming funds are political contributions or 25 percent of its expenditures are political expenditures. The setting of a bright-line activity threshold at 25 percent of a group's activity has proved unworkable and is contrary to how a similar federal law is interpreted for defining political committee status.

The amended rule avoids a bright-line approach based on a percentage of spending. Instead, it embraces the Federal Election Code (FEC) method of determining whether a group is a political committee by taking a holistic view of the group's activity to be adjudicated on a case-by-case basis. This approach has been upheld as constitutional by the Fourth Circuit. *Real Truth About Abortion, Inc. v. FEC*, 681 F.3d 544, 557-58 (4th Cir. 2012); see also *Citizens for Responsibility & Ethics in Washington v. FEC*, 209 F. Supp. 3d 77, 82 (D.D.C. 2016). Embracing the FEC approach will also allow the TEC and regulated community to more easily use the precedent set by FEC adjudications and federal court decisions to determine whether a group is a political committee. See Tex. Ethics Comm'n Op. No. 614 (2024).

The Commission received one public comment on its initial proposal, from attorney Andrew Cates. Mr. Cates suggested adding language that a politically active corporation that is suspected of being a political committee would have an affirmative defense of proving that the group's political expenditures did not exceed 50 percent of the group's overall spending. The Commission incorporated that language into the adopted rule.

The amendment is adopted under Texas Government Code §571.062, which authorizes the Commission to adopt rules to administer Title 15 of the Election Code.

The adopted amended rule affects Title 15 of the Election Code.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## TITLE 19. EDUCATION

### PART 2. TEXAS EDUCATION AGENCY

#### CHAPTER 97. PLANNING AND ACCOUNTABILITY

##### SUBCHAPTER AA. ACCOUNTABILITY AND PERFORMANCE MONITORING

#### 19 TAC §97.1001

*(Editor's note: In accordance with Texas Government Code, §2002.014, which permits the omission of material which is "cumbersome, expensive, or otherwise inexpedient," the figure in 19 TAC §97.1001 is not included in the print version of the Texas Register. The figure is available in the on-line version of the June 27, 2025, issue of the Texas Register.)*

The Texas Education Agency (TEA) adopts an amendment to §97.1001, concerning the accountability rating system. The amendment is adopted with changes to the proposed text as published in the April 18, 2025 issue of the *Texas Register* (50 TexReg 2472) and will be republished. The amendment adopts in rule applicable excerpts of the *2026 Accountability Manual*. Earlier versions of the manual will remain in effect with respect to the school years for which they were developed.

**REASONED JUSTIFICATION:** TEA has adopted its academic accountability manual in rule since 2000 under §97.1001. The accountability system evolves from year to year, so the criteria and standards for rating and acknowledging schools in the most current year differ to some degree from those applied in the prior year.

The amendment to §97.1001 adopts excerpts of the *2026 Accountability Manual* into rule as a figure. The excerpts, Chapters 1-12 of the *2026 Accountability Manual*, specify the indicators, standards, and procedures used by the commissioner to determine accountability ratings for districts, campuses, and charter schools. These chapters also specify indicators, standards, and procedures used to determine distinction designations on additional indicators for Texas public school campuses and districts. Chapter 12 describes the specific criteria and calculations that will be used to assign 2026 Results Driven Accountability (RDA) performance levels. Ratings may be revised as a result of investigative activities by the commissioner as authorized under Texas Education Code (TEC), §39.056 and §39.003.

Following is a chapter-by-chapter summary of the changes for this year's manual. In every chapter, dates and years for which

data are considered were updated to align with 2026 accountability and RDA. Edits for clarity regarding consistent language and terminology throughout each chapter are embedded within the adopted *2026 Accountability Manual*. For example, references to the Public Education Information Management System (PEIMS) October submission were changed to the PEIMS Fall submission throughout the manual.

Chapter 1 gives an overview of the entire accountability system. Language in the Who is Rated section has been adjusted to clarify membership. One reason for being *Not Rated* was added back into the manual for clarity. Language was adjusted to add clarity to the Accountability Subset Rule section and the STAAR end-of-course (EOC) Retest Performance section. Based on public comment, clarification was provided at adoption in the table on page 7 under Accountability Subset Rule, on page 9 in the new Inclusion of Emergent Bilingual (TS) Students in STAAR-Based Indicators section, on page 9 in the Texas Student Data System (TSDS) PEIMS-Based Indicators section, in the table on page 10 under TSDS PEIMS-Based Indicators, and in the table on page 11 under Other Indicators.

Chapter 2 describes the "Student Achievement" domain. Emergent bilingual (EB) student coding was moved to Appendix H--Data Sources instead of being listed in the STAAR Component--Inclusion of EB Students section. A new section regarding Inclusion of STAAR English Learner Performance Measure Results was added. Language in the College, Career, and Military Readiness Component section was adjusted to provide clarity regarding college prep courses. A table was added regarding college, career, and military readiness (CCMR) credit requirements in the Schedule for Reviewed and Approved College Prep Courses section. Calculation language was clarified in the Graduation Rate--Minimum Size Criteria and Small Numbers Analysis and the Annual Dropout Rate--Minimum Size Criteria and Small Numbers Analysis sections. Based on public comment, clarification was provided at adoption on page 15 in the Overview section; on page 16 in the Inclusion of STAAR English Learner Performance Measure Results section; in the table on page 18 under STAAR Component--Example Calculation; in the bullets on page 19 under College, Career, and Military Readiness Component; in the College, Career, and Military Readiness Component section regarding adjustments to the timeline on pages 19, 20, and 21; on page 23 in the College, Career, and Military Readiness Component--Minimum Size Criteria and Small Numbers Analysis section; on page 27 in the alternative education accountability (AEA) College, Career, and Military Readiness Component--Minimum Size Criteria and Small Numbers Analysis section; and on page 28 in the AEA Graduation Rate--Minimum Size Criteria and Small Numbers Analysis section.

Chapter 3 describes the "School Progress" domain. EB student coding was moved to Appendix H--Data Sources instead of being listed in the Part A: Academic Growth--Inclusion of EB Students, Part B: Relative Performance--Inclusion of EB Students, and AEA Part B: Retest Growth--Inclusion of EB Students sections. Based on public comment, clarification was provided at adoption on page 31 in the Part A: Academic Growth--Minimum Size Criteria and Small Numbers Analysis section and on page 32 in the Part A: Academic Growth: Annual Growth--Methodology section.

Chapter 4 describes the "Closing the Gaps" domain. Language regarding minimum size was moved to the Two Lowest Performing Racial/Ethnic Groups from the Prior Year and the Steps to

Determine the Two Lowest Performing Groups sections. EB student coding was moved to Appendix H--Data Sources instead of being listed in the Inclusion of EB students section. Calculation language was clarified in the Federal Graduation Status--Minimum Size Criteria and Small Numbers Analysis All Students section. Language was updated to reflect the new methodology for measuring Texas English Language Proficiency System progress in the Progress in Achieving English Language Proficiency Component section. Based on public comment, the Continuously Enrolled section previously on page 42 was moved at adoption to page 110 in Chapter 10, and clarification was provided at adoption on page 43 in the Current Special Education Students section by moving the information regarding former special education students to Chapter 10.

Chapter 5 describes how the overall ratings are calculated. Language was added for clarity in the District Proportional Domain Methodology section. Based on public comment, clarification was provided at adoption by reordering the information on page 63 in the Campus Overall Rating section and on page 65 in the District Overall Rating section.

Chapter 6 describes distinction designations. Language was added to the Other Information section.

Chapter 7 describes the pairing process and AEA provisions. No edits beyond the technical edits described previously were made.

Chapter 8 describes the process for appealing ratings. No edits beyond the technical edits described previously were made.

Chapter 9 describes the responsibilities of TEA, the responsibilities of school districts and open-enrollment charter schools, and the consequences to school districts and open-enrollment charter schools related to accountability and interventions. Language regarding *Not Rated* were removed from the Actions Required Due to Low Ratings or Low Accreditation Status section.

Chapter 10 provides information on the federally required identification of schools for improvement. The proposed manual contained no edits beyond the technical edits described previously. Based on public comment, the Continuously Enrolled section was moved at adoption from Chapter 4 to page 110, and information regarding Former Special Education Students was moved at adoption from Chapter 4 to page 111.

Chapter 11 describes the local accountability system. No edits beyond the technical edits described previously were made.

Chapter 12 describes the RDA system. Language was clarified in the Principle 2: Drives Improved Results and High Expectations section. Language in the 2026 RDA Changes section was rewritten. Language was adjusted for clarity in the RDA PL Assignments for Program Area Determinations section.

Corrections were made at adoption to the information under 2026 RDA Changes on page 119 and on page 120 in the New DL 4 Needs Substantial Intervention (NSI) (DL4) Criteria section.

**SUMMARY OF COMMENTS AND AGENCY RESPONSES:** The public comment period on the proposal began April 18, 2025, and ended May 19, 2025. Following is a summary of the public comments received and agency responses.

*Edits for Clarification*

Comment: A district administrator recommended various formatting updates, including font sizes, table ordering, table numbers, the order of sections, and page spacing.

Response: The agency disagrees with the scope of these formatting changes. Maintaining the format in the current manual will ensure that the agency does not signal a change to methodology where there is not a change.

Comment: A district administrator requested clarification regarding the enhanced performance levels methodology used in the transition table for measuring School Progress, Part A: Academic Growth, specifically, if the raw score of zero is included.

Response: The agency agrees and has made a clarifying edit in Chapter 3 on page 32 to specify that an 'enhanced' performance level used for accountability is not calculated for a raw score of zero. The document, *STAAR Raw Scores and Scale Scores Associated with the Calculation of School Progress, Part A: Academic Growth within the A-F Accountability System*, is posted on the Performance Reporting website each year.

Comment: An education service center (ESC) representative requested clarifying edits to the manual regarding AEA and small numbers methodology.

Response: The agency agrees and has added clarifying statements in Chapter 2 on page 23 in the College, Career, and Military Readiness Component--Minimum Size Criteria and Small Numbers Analysis; on page 27 in the AEA College, Career, and Military Readiness Component--Minimum Size Criteria and Small Numbers Analysis section; and on page 28 in the AEA Graduation Rate--Minimum Size Criteria and Small Numbers Analysis.

Comment: The Texas Center for State Accountability (TXCSA) suggested that the definition of Former Special Education be updated in the *2026 Accountability Manual* to align with TEC, §39.053.

Response: The agency agrees and has added clarity to Chapter 10 on page 111 regarding the years of Special Education status used.

Comment: A district administrator requested clarity regarding the inclusion/exclusion criteria in Chapter 1: STAAR Component--Inclusion of EB Students and whether Appendix H that is referenced will align with the *Accountability Rating System Manual* for 2026 ratings.

Response: The agency agrees that additional clarity is needed within the *Accountability Rating System Manual* for 2026 ratings regarding the inclusion/exclusion criteria for EB students and has added the language from the manual for 2025 ratings to Chapter 1 on page 9.

Comment: lead4ward suggested the manual clarify that the subset rule does not apply to districts, specifically stating that the "district accountability subset" is no longer applicable.

Response: The agency agrees and has made a clarifying edit to Chapter 1 on page 7 to the column headers in the table to remove "district" from "subset of district/campus accountability."

Comment: lead4ward recommended changes to the language added to the 2026 manual at the beginning of Chapter 2 under the heading "Overview" that specified student achievement in the areas of performance on State of Texas Assessments of

Academic Readiness (STAAR®), STAAR® EOC assessments, and STAAR® Alternate 2 assessments.

Response: The agency agrees with limiting confusion in the introduction by simplifying the language in Chapter 2 on page 15 to how it was described in the manual for 2025 ratings.

Comment: lead4ward recommended additional changes to the language added to the 2026 manual under the STAAR Component--Assessments and Measures Evaluated section in Chapter 2 and the Academic Achievement--Assessments and Measures Evaluated section in Chapter 4 regarding references to STAAR® assessments for Grades 3-12.

Response: The agency disagrees and has determined that the proposed language presents the clearest descriptions.

Comment: lead4ward recommended the word "eligible" be added to the sentence "A student's EL performance measure provides a more meaningful gauge of the achievement on STAAR for an eligible EB student" in Chapter 2.

Response: The agency agrees and has made this change to the *2026 Accountability Manual* in Chapter 2 on page 16.

Comment: lead4ward recommended the word "Reading" be replaced with "Reading Language Arts" in Chapter 2 for the STAAR Component--Example Calculation.

Response: The agency agrees and has made this change to the *2026 Accountability Manual* in Chapter 2 on page 18.

Comment: lead4ward requested additional clarity be added to Chapter 2 in the College, Career, and Military Readiness Component section about College Preparatory Course grade level requirements for 2026.

Response: The agency disagrees with adding information about 2026 to this section, as the current language is used to indicate the permanent requirement, which is Grade 12 for eligibility. However, the agency has added to Chapter 2 on page 19 the word "starting" to provide clarity about the timing of that requirement.

Comment: lead4ward requested that for additional clarity in Chapter 2, the phrase "Complete an Aligned Program of Study" should be removed and further clarity added about the requirements in 2026 for the CCMR indicator, Earn an Industry-Based Certification (IBC), and Complete an Aligned Program of Study.

Response: The agency disagrees with removing the phrase "and Complete an Aligned Program of Study" and adding additional descriptions about 2026 to this section in Chapter 2, as the current language is used to indicate the permanent requirement, which will be to complete an aligned program of study.

Comment: lead4ward suggested that in Chapter 3 on page 30 the word "STAAR" before "STAAR English I, English II, and Algebra I EOC assessment results" is confusing.

Response: The agency disagrees and has determined that the proposed language presents the clearest descriptions.

Comment: lead4ward suggested that in Chapter 3, "STAAR Alternate 2" assessments be more clearly specified as part of the calculation of Part A: Academic Growth--Minimum Size Criteria and Small Numbers Analysis.

Response: The agency agrees and has made this change to the *2026 Accountability Manual* in Chapter 3 on page 31.

Comment: lead4ward suggested that in Chapter 3 School Progress, Part B: Retest Growth for campuses evaluated under AEA methodology should be renamed Part B: EOC Retest Performance.

Response: The agency disagrees and has determined that the proposed language presents the clearest description.

Comment: lead4ward suggested a change in Chapter 4 to the way manual describes the calculation of the denominator for determining expected growth for two points in Closing the Gaps.

Response: The agency disagrees and has determined that the proposed language presents the clearest description.

Comment: lead4ward suggested Chapter 4 not repeat the CCMR components already listed in Chapter 2.

Response: The agency disagrees and has determined that the current language presents the clearest description.

Comment: A district administrator recommended a change for clarity to the listing of the two groups that are not a part of the Closing the Gaps Domain Rating calculation: Former Special Education and Continuously Enrolled.

Response: The agency agrees. The Continuously Enrolled section previously in Chapter 4 on page 42 was moved at adoption to page 110 in Chapter 10, and clarification was provided at adoption in Chapter 4 on page 43 in the Current Special Education Students section by moving the information regarding former special education students to Chapter 10.

Comment: A district administrator recommended separating Campus Methodology from District Methodology in the steps for calculating the overall rating.

Response: The agency agrees and has reordered the information on page 63 for Campus Overall Rating and on page 66 for District Overall Rating.

#### *Advanced Math Pathways and Accelerated Testers*

Comment: A district administrator requested an update to the SAT/ACT scores needed for accelerated testers to be considered Meets and Masters on STAAR®-based measures.

Response: The agency disagrees with making changes that are beyond the scope of the current rule proposal. The agency will review the accelerated testers methodology, including the score ranges needed on SAT/ACT, for future implementation into the next refresh of the A-F system.

Comment: A district administrator requested to include Advanced Placement as an additional assessment for accelerated testers.

Response: The agency disagrees that it has the authority to make such a change at this time. As indicated in the agency's accelerated testers waiver renewal request to the U.S. Department of Education (USDE), "students completing an advanced course in middle school will continue to be assessed in high school with one of these assessments (SAT or ACT) in the applicable subject area. Students completing an advanced science course in middle school will continue to be assessed again in high school using the ACT science assessment." The waiver renewal request is available at <https://tea.texas.gov/about-tea/laws-and-rules/essa>.

Comment: The College Board requested that the SAT be included as an additional assessment for accelerated testers and

added as an indicator for the distinction designation for Academic Achievement in Science.

Response: The agency disagrees that it has the authority to make such a change at this time. As indicated in the agency's accelerated testers waiver renewal request to the USDE, "Students completing an advanced science course in middle school will continue to be assessed again in high school using the ACT science assessment."

Comment: A district administrator provided feedback on the March Texas Accountability Advisory Group proposal regarding middle school students who reach approaches on STAAR® EOC assessments and are considered accelerated testers.

Response: This comment is outside the scope of the proposed rulemaking. However, the agency will continue to gather feedback from stakeholders on changes to future accountability refresh cycles.

#### *School Progress Domain*

Comment: A district administrator suggested making a transition table specific for students that transition from taking the STAAR® test in Spanish to taking the STAAR® test in English.

Response: The agency disagrees with making changes that are beyond the scope of the current rule proposal. Additionally, the agency has conducted analysis on the growth of students that transition tested languages and has determined this is not an area for future implementation.

#### *College, Career, and Military Readiness*

Comment: An individual requested an additional year to move to the college preparatory course list.

Response: The agency agrees and has announced a change to the timeline for the College Preparatory Approved Course List. (See <https://tea.texas.gov/about-tea/news-and-multimedia/correspondence/taa-letters/postponement-of-approved-list-of-college-preparatory-courses-to-2028-accountability>.) 2026 graduates will not be limited to courses from the approved course list for CCMR credit in 2027 accountability. The requirement for approved College Preparatory Courses for CCMR credit has been postponed to the 2028 accountability refresh year and will be implemented with 2027 graduates. Clarification was provided at adoption in Chapter 2 to the timeline on pages 19, 20, and 21.

Comment: A district administrator requested consideration and clarity for when a student takes a required college preparatory course in Grade 12 but is retained in Grade 12 for a repeat year.

Response: The agency disagrees that an edit is needed as the manual already includes the statement, "The grade of the student at the time of the course will be based on the grade submitted in the TSDS PEIMS Summer submission." Credit for CCMR will be earned if the student took the course when the district reported them as in Grade 12.

Comment: lead4ward suggested that "Complete College Prep Course" be given its own row in the table describing the TSDS PEIMS data used for accountability indicators due to changes to the grade levels eligible for CCMR credit beginning in 2026 and 2027 accountability.

Response: The agency agrees and has made a clarifying edit to Chapter 1 on page 10 in the College Prep Course row of the table for TSDS PEIMS data provided by school districts and used to create specific CCMR indicators.

Comment: lead4ward suggested that the CCMR calculation as described in the Other Indicators table should use the Texas Success Initiative (TSI) assessment results beginning with the introduction of the TSI assessment in June 2011.

Response: The agency agrees with clarifying the dates of TSI assessment results used in CCMR and has made an update to Chapter 1 on page 11 in the table describing the Other data used for CCMR. However, the agency disagrees with using the TSI assessment results back to June 2011 and has clarified that CCMR uses data dating 10 years back from the year of accountability.

Comment: lead4ward recommended that any changes to the valuation of IBCs be applied to students entering Grade 9 in the year following the final adoption of 19 TAC §97.1003, Local Accountability System.

Response: The agency disagrees as the comment is beyond the scope of the current rule proposal. However, the agency will continue to work with stakeholders to consider policy implementation for future accountability refresh cycles.

Comment: The College Board recommended changes to the development of the IBC lists used in state accountability, including updating the list of approved IBCs every two years, approving entry-level certifications, and removing the requirement of attainability by adults as part of the requirements of approved IBCs.

Response: This comment is outside the scope of the proposed rulemaking.

Comment: The TXCSA recommended the addition of graduation code 56 in the definition of Graduate with Completed Individualized Education Program (IEP) and Workforce Readiness for CCMR.

Response: The agency disagrees with the recommendation as this code does not demonstrate Workforce Readiness as defined by the IEP and the Workforce Readiness indicator.

Comment: The TXCSA suggested the agency not implement the Grade 12 requirement to earn CCMR credit for College Preparatory Courses, which will be in effect with the 2027 accountability, and the removal of the Schedule for Phase-in of College Prep 12th Grade requirement section in the *2026 Accountability Manual*.

Response: The agency disagrees and reiterates the statutory requirement that college preparatory courses be designed for Grade 12 students.

Comment: The TXCSA suggested a revision to the CCMR methodology in the *2026 Accountability Manual* to include mid-year December graduates in CCMR calculations.

Response: The agency disagrees that a revision of the manual is needed as the CCMR calculation already includes mid-year or early graduates.

Comment: The TXCSA indicated that House Bill 773, 87th Texas Legislature, Regular Session, 2021, did not require students to complete an aligned program of study in addition to successfully meeting IBC requirements and suggested that the two should not be combined in the CCMR indicator.

Response: The agency disagrees with separating these two indicators of a student's college or career readiness since program of study completion and IBC attainment are stronger indicators when combined than they are independently.

Comment: The TXCSA commented that based on TEC, §39.053, students who have completed an internship or practicum should be included in the CCMR calculation.

Response: The agency disagrees as policy changes are beyond the scope of the current rule proposal. The agency will continue to work with stakeholders to consider the CCMR indicators for future implementation in the next refresh of the A-F system.

Comment: The TXCSA suggested that the methodology in the *2026 Accountability Manual* for CCMR credit under Level I or Level II certification be modified to students who are "admitted" instead of "earning" a Level I or Level II certificate.

Response: The agency disagrees as admission requirements for Career and Technical Education Certificate in TEC, §61.003(12)(C), varies by institution and program and does not imply successful completion of a workforce program offered by an institution of higher education.

#### *District and Campus Ratings*

Comment: lead4ward and a district administrator suggested that the two steps in the Overall (District and Campus) Rating calculation, called "3 Ds Rule" and "3 Fs Rule," be removed from the *2026 Accountability Manual*.

Response: The agency disagrees. The D and F requirements are aligned with the redefinition of acceptable and unacceptable performance in Senate Bill 1365, 87th Texas Legislature, Regular Session, 2021. The agency will continue to work with stakeholders to consider policy implementations for future accountability refresh cycles.

Comment: lead4ward and a district administrator suggested that the Overall Rating (Districts) Campus Scaled Score Rule be removed from the methodology for determining the district's overall and domain ratings in the *2026 Accountability Manual*.

Response: The agency disagrees as policy changes are beyond the scope of the current rule proposal. The agency will review the district proportional methodology implemented in 2023 as part of the next refresh of the A-F system.

Comment: lead4ward suggested a change to the Closing the Gaps score methodology, specifically for new campuses, to address the inability to earn one or two points given the lack of prior year data that is required.

Response: The agency disagrees as policy changes are beyond the scope of the current rule proposal. The agency will review the methodology for new campuses for future consideration in the next refresh of the A-F system.

Comment: The TXCSA recommended new campuses (such as campuses in the first year of STAAR® testing or those with a new county district campus numbers) not be evaluated in the Closing the Gaps domain for the first year and re-zoned campuses not be evaluated in Closing the Gaps.

Response: The agency disagrees that campuses of these types should be measured differently under the Closing the Gaps domain. As the state uses the Closing the Gaps domain to fulfill federal requirements under the Every Student Succeeds Act, all campuses must be scored under the same methodology.

Comment: The TXCSA requested a change to the *2026 Accountability Manual* to allow appeals to the Closing the Gaps domain based on the two lowest performing student groups, specifically in situations of a new campus or re-zoned campus.

Response: The agency disagrees as policy changes are beyond the scope of the current rule proposal. The agency will review the appeals procedures for future consideration in the next refresh of the A-F system.

Comment: The TXCSA requested that the federal school identifications be eligible for appeal.

Response: The agency disagrees that the federal school identifications are appealable as this identification is based on the release of preliminary accountability data.

*Results-Driven Accountability (Chapter 12 of the 2026 Accountability Manual)*

Comment: An ESC representative requested that the minimum size requirement be reduced for special education indicators.

Response: This comment is outside the scope of the proposed rulemaking. The agency will research and analyze student group minimum size requirements as RDA is integrated into the A-F system in the next refresh of the system.

Comment: An ESC representative requested additional clarity be provided on the data used in RDA significant disproportionality indicators, including the specific PEIMS codes in Appendix K.

Response: The agency disagrees as appendices are outside the scope of the proposed rulemaking. However, the agency will gather further stakeholder feedback on the addition of PEIMS codes to Appendix K.

*Accountability Manual Release*

Comment: lead4ward and a district administrator requested publishing the appendices with the proposed *2026 Accountability Manual* and future releases of the manual.

Response: The agency disagrees. The appendices will be published as soon as it is feasible after the adoption of the manual.

STATUTORY AUTHORITY. The amendment is adopted under Texas Education Code (TEC), §7.021(b)(1), which authorizes the Texas Education Agency (TEA) to administer and monitor compliance with education programs required by federal or state law, including federal funding and state funding for those programs; TEC, §7.028, which authorizes TEA to monitor as necessary to ensure school district and charter school compliance with federal law and regulations, financial integrity, and data integrity and authorizes the agency to monitor school district and charter schools through its investigative process. TEC, §7.028(a), authorizes TEA to monitor special education programs for compliance with state and federal laws; TEC, §12.056, which requires that a campus or program for which a charter is granted under TEC, Chapter 12, Subchapter C, is subject to any prohibition relating to the Public Education Information Management System (PEIMS) to the extent necessary to monitor compliance with TEC, Chapter 12, Subchapter C, as determined by the commissioner; high school graduation under TEC, §28.025; special education programs under TEC, Chapter 29, Subchapter A; bilingual education under TEC, Chapter 29, Subchapter B; and public school accountability under TEC, Chapter 39, Subchapters B, C, D, F, and J, and Chapter 39A; TEC, §12.104, which states that a charter granted under TEC, Chapter 12, Subchapter D, is subject to a prohibition, restriction, or requirement, as applicable, imposed by TEC, Title 2, or a rule adopted under TEC, Title 2, relating to PEIMS to the extent necessary to monitor compliance with TEC, Chapter 12, Subchapter D, as determined by the commissioner; high school graduation requirements under TEC, §28.025; special educa-

tion programs under TEC, Chapter 29, Subchapter A; bilingual education under TEC, Chapter 29, Subchapter B; discipline management practices or behavior management techniques under TEC, §37.0021; public school accountability under TEC, Chapter 39, Subchapters B, C, D, F, G, and J, and Chapter 39A; and intensive programs of instruction under TEC, §28.0213; TEC, §29.001, which authorizes TEA to effectively monitor all local educational agencies (LEAs) to ensure that rules relating to the delivery of services to children with disabilities are applied in a consistent and uniform manner, to ensure that LEAs are complying with those rules, and to ensure that specific reports filed by LEAs are accurate and complete; TEC, §29.0011(b), which authorizes TEA to meet the requirements under (1) 20 U.S.C. §1418(d) and its implementing regulations to collect and examine data to determine whether significant disproportionality based on race or ethnicity is occurring in the state and in the school districts and open-enrollment charter schools in the state with respect to the (a) identification of children as children with disabilities, including the identification of children as children with particular impairments; (b) placement of children with disabilities in particular educational settings; and (c) incidence, duration, and type of disciplinary actions taken against children with disabilities including suspensions or expulsions; or (2) 20 U.S.C. §1416(a)(3)(C) and its implementing regulations to address in the statewide plan the percentage of schools with disproportionate representation of racial and ethnic groups in special education and related services and in specific disability categories that results from inappropriate identification; TEC, §29.010(a), which authorizes TEA to adopt and implement a comprehensive system for monitoring LEA compliance with federal and state laws relating to special education, including ongoing analysis of LEA special education data; TEC, §29.062, which authorizes TEA to evaluate and monitor the effectiveness of LEA programs and apply sanctions concerning emergent bilingual students; TEC, §29.066, which authorizes PEIMS reporting requirements for school districts that are required to offer bilingual education or special language programs to include the following information in the district's PEIMS report (1) demographic information, as determined by the commissioner, on students enrolled in district bilingual education or special language programs; (2) the number and percentage of students enrolled in each instructional model of a bilingual education or special language program offered by the district; and (3) the number and percentage of emergent bilingual students who do not receive specialized instruction; TEC, §29.081(e), (e-1), and (e-2), which define criteria for alternative education programs for students at risk of dropping out of school and subjects those campuses to the performance indicators and accountability standards adopted for alternative education programs; TEC, §29.201 and §29.202, which describe the Public Education Grant (PEG) program and eligibility requirements; TEC, §39.003 and §39.004, which authorize the commissioner to adopt procedures relating to special investigations. TEC, §39.003(d), allows the commissioner to take appropriate action under Chapter 39A, to lower the district's accreditation status or the district's or campus's accountability rating based on the results of the special investigation; TEC, §39.051 and §39.052, which authorize the commissioner to determine criteria for accreditation statuses and to determine the accreditation status of each school district and open-enrollment charter school; TEC, §39.053, which authorizes the commissioner to adopt a set of indicators of the quality of learning and achievement and requires the commissioner to periodically review the indicators for consideration of appropriate revisions; TEC, §39.054, which

requires the commissioner to adopt rules to evaluate school district and campus performance and to assign a performance rating; TEC, §39.0541, which authorizes the commissioner to adopt indicators and standards under TEC, Chapter 39, Subchapter C, at any time during a school year before the evaluation of a school district or campus; TEC, §39.0543, which describes acceptable and unacceptable performance as referenced in law; TEC, §39.0546, which requires the commissioner to assign a school district or campus a rating of "Not Rated" for the 2021-2022 school year, unless, after reviewing the district or campus under the methods and standards adopted under TEC, §39.054, the commissioner determines the district or campus should be assigned an overall performance rating of C or higher; TEC, §39.0548, which requires the commissioner to designate campuses that meet specific criteria as dropout recovery schools and to use specific indicators to evaluate them; TEC, §39.055, which prohibits the use of assessment results and other performance indicators of students in a residential facility in state accountability; TEC, §39.056, which authorizes the commissioner to adopt procedures relating to monitoring reviews and special investigations; TEC, §39.151, which provides a process for a school district or an open-enrollment charter school to challenge an academic or financial accountability rating; TEC, §39.201, which requires the commissioner to award distinction designations to a campus or district for outstanding performance; TEC, §39.2011, which makes open-enrollment charter schools and campuses that earn an acceptable rating eligible for distinction designations; TEC, §39.202 and §39.203, which authorize the commissioner to establish criteria for distinction designations for campuses and districts; TEC, §39A.001, which authorizes the commissioner to take any of the actions authorized by TEC, Chapter 39, Subchapter A, to the extent the commissioner determines necessary if a school does not satisfy the academic performance standards under TEC, §39.053 or §39.054, or based upon a special investigation; TEC, §39A.002, which authorizes the commissioner to take certain actions if a school district becomes subject to commissioner action under TEC, §39A.001; TEC, §39A.004, which authorizes the commissioner to appoint a board of managers to exercise the powers and duties of a school district's board of trustees if the district is subject to commissioner action under TEC, §39A.001, and has a current accreditation status of accredited-warned or accredited-probation; or fails to satisfy any standard under TEC, §39.054(e); or fails to satisfy any financial accountability standard; TEC, §39A.005, which authorizes the commissioner to revoke school accreditation if the district is subject to TEC, §39A.001, and for two consecutive school years has received an accreditation status of accredited-warned or accredited-probation, failed to satisfy any standard under TEC, §39.054(e), or failed to satisfy a financial performance standard; TEC, §39A.007, which authorizes the commissioner to impose a sanction designed to improve high school completion rates if the district has failed to satisfy any standard under TEC, §39.054(e), due to high school completion rates; TEC, §39A.051, which authorizes the commissioner to take action based on campus performance that is below any standard under TEC, §39.054(e); and TEC, §39A.063, which authorizes the commissioner to accept substantially similar intervention measures as required by federal accountability measures in compliance with TEC, Chapter 39A.

CROSS REFERENCE TO STATUTE. The amendment implements Texas Education Code (TEC), §§7.021(b)(1); 7.028; 12.056; 12.104; 29.001; 29.0011(b); 29.010(a); 29.062; 29.066; 29.081(e), (e-1), and (e-2); 29.201; 29.202; 39.003; 39.004;

39.051; 39.052; 39.053; 39.054; 39.0541; 39.0543; 39.0546; 39.0548; 39.055; 39.056; 39.151; 39.201; 39.2011; 39.202; 39.203; 39A.001; 39A.002; 39A.004; 39A.005; 39A.007; 39A.051; and 39A.063.

*§97.1001. Accountability Rating System.*

(a) The rating standards established by the commissioner of education under Texas Education Code (TEC), §§39.052(a) and (b)(1)(A); 39.053; 39.054; 39.0541; 39.0548; 39.055; 39.151; 39.201; 39.2011; 39.202; 39.203; 29.081(e), (e-1), and (e-2); and 12.104(b)(2)(L), shall be used to evaluate the performance of districts, campuses, and charter schools. The indicators, standards, and procedures used to determine ratings will be annually published in official Texas Education Agency publications. These publications will be widely disseminated and cover the following:

- (1) indicators, standards, and procedures used to determine district ratings;
- (2) indicators, standards, and procedures used to determine campus ratings;
- (3) indicators, standards, and procedures used to determine distinction designations; and
- (4) procedures for submitting a rating appeal.

(b) The procedures by which districts, campuses, and charter schools are rated and acknowledged for 2026 are based upon specific criteria and calculations, which are described in excerpted sections of the *2026 Accountability Manual* provided in this subsection.

Figure: 19 TAC §97.1001(b)

(c) Ratings may be revised as a result of investigative activities by the commissioner as authorized under TEC, §39.003.

(d) The specific criteria and calculations used in the accountability manual are established annually by the commissioner and communicated to all school districts and charter schools.

(e) The specific criteria and calculations used in the annual accountability manual adopted for prior school years remain in effect for all purposes, including accountability, data standards, and audits, with respect to those school years.

(f) In accordance with TEC, §7.028(a), the purpose of the Results Driven Accountability (RDA) framework is to evaluate and report annually on the performance of school districts and charter schools for certain populations of students included in selected program areas. The performance of a school district or charter school is included in the RDA report through indicators of student performance and program effectiveness and corresponding performance levels established by the commissioner.

(g) The assignment of performance levels for school districts and charter schools in the 2026 RDA report is based on specific criteria and calculations, which are described in the *2026 Accountability Manual* provided in subsection (b) of this section.

(h) The specific criteria and calculations used in the RDA framework are established annually by the commissioner and communicated to all school districts and charter schools.

(i) The specific criteria and calculations used in the annual RDA manual adopted for prior school years remain in effect for all purposes, including accountability and performance monitoring, data standards, and audits, with respect to those school years.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## CHAPTER 111. TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS

### SUBCHAPTER B. MIDDLE SCHOOL

#### 19 TAC §§111.29 - 111.31

The State Board of Education (SBOE) adopts new §§111.29 - 111.31, concerning middle school Texas Essential Knowledge and Skills (TEKS) for mathematics. Section 111.29 is adopted without changes to the proposed text as published in the February 28, 2025 issue of the *Texas Register* (50 TexReg 1080) and will not be republished. Section 111.30 and §111.31 are adopted with changes to the proposed text as published in the February 28, 2025 issue of the *Texas Register* (50 TexReg 1080) and will be republished. The adopted new sections add TEKS to support middle school advanced mathematics programs designed to enable students to enroll in Algebra I in Grade 8.

**REASONED JUSTIFICATION:** The board received training from a standards writing advisor at the July 2014 meeting. The standards writing advisor provided additional training to Texas Education Agency (TEA) staff in October 2014 to support future facilitation of the TEKS review committees.

In 2017, the SBOE significantly revised the process for the review and revision of the TEKS. At the November 2018 meeting, the SBOE approved updates to the 2017 TEKS review and revision process to better clarify the process. The updated process was used for the review of the physical education, health education, and science TEKS.

At the January 2021 meeting, the board held a work session to discuss the timeline for the TEKS review and revision process and associated activities, including updates to State Board for Educator Certification teacher assignment rules and certification exams, adoption of instructional materials, and the completion of the Texas Resource Review. The board discussed potential adjustments to the TEKS and Instructional Materials Review and Adoption Schedule. At the April 2021 meeting, the SBOE approved revisions to the TEKS and Instructional Materials Review and Adoption Schedule.

At the April 2023 SBOE meeting, the board discussed and approved changes to the TEKS review process, including approving a process for selecting work group members.

At the April 2024 meeting, TEA staff shared an overview of upcoming interrelated needs for TEKS review and revision and instructional materials review and approval (IMRA) and identified two needs related to mathematics, including options for instructional materials for accelerated learning and establishing TEKS to support middle school advanced mathematics pathways. At the June 2024 meeting, the board approved moving forward with the establishment of TEKS for middle school advanced mathe-

tics and inclusion of advanced mathematics in a future IMRA process.

Applications to serve on the middle school advanced mathematics TEKS work group were collected by TEA in July and August 2024. TEA provided SBOE members with the applications for approval to serve on the work group in late August.

At the September 2024 SBOE meeting, the board directed the work group to present two models for middle school advanced mathematics TEKS. One model was to be based on the importance of keeping the Grade 6 TEKS similar to the current TEKS and to combine the Grade 7 and Grade 8 TEKS into Grade 7. The SBOE gave the work group leeway to analyze models from Barbers Hill Independent School District (ISD), Tomball ISD, and other school districts to develop recommendations for the second model. Additionally, the SBOE directed the work group to recommend one of the two models for the SBOE's further consideration. Work groups convened for two face-to-face meetings to develop recommendations for the proposed TEKS for middle school advanced mathematics in October 2024.

A public hearing was conducted and a discussion item regarding TEKS for middle school advanced mathematics was presented to the Committee of the Full Board at the November 2024 SBOE meeting. At that time, the SBOE selected the second model as the plan for the middle school advanced mathematics programs. The work group met in December 2024 to finalize its recommendations for the second model.

The following changes were made to the rules since published as proposed.

Section 111.30(c)(8)(C) was amended to read, "identify examples of proportional and non-proportional relationships that arise from mathematical and real-world problems."

The section title for §111.31 was amended by adding the roman numeral "I" after "Algebra."

Section 111.31(b) was amended to read, "This course is recommended for students in Grade 8. Prerequisite: Middle School Advanced Mathematics, Grade 7 or Mathematics, Grade 8. Students shall be awarded one credit that satisfies the Algebra I requirement for high school graduation. This course satisfies the requirement for any course which identifies Algebra I as a prerequisite."

The first sentence in §111.31(c)(4) was amended to read, "In Grade 8, Middle School Advanced Mathematics, Algebra I, students will build on the knowledge and skills for mathematics in Middle School Advanced Mathematics, Grades 6 and 7, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions."

The last sentence in §111.31(c)(4) was amended to read, "The use of technology, including graphing tools, is essential in Grade 8, Middle School Advanced Mathematics, Algebra I, to bridge conceptual understanding and procedural fluency."

The SBOE approved the new rules for first reading and filing authorization at its January 31, 2025 meeting and for second reading and final adoption at its April 11, 2025 meeting.

In accordance with TEC, §7.102(f), the SBOE approved the new rules for adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2025-2026 school year. The earlier effective date will enable districts to be-

gin preparing for implementation of TEKS that support a middle school advanced mathematics program. The effective date is 20 days after filing as adopted with the Texas Register.

**SUMMARY OF COMMENTS AND RESPONSES:** The public comment period on the proposal began February 28, 2025, and ended at 5:00 p.m. on March 31, 2025. The SBOE also provided an opportunity for registered oral and written comments at its April 2025 meeting in accordance with the SBOE board operating policies and procedures. Following is a summary of the public comments received and corresponding responses.

**Comment.** A teacher, two administrators, and a community member asked which State of Texas Assessments of Academic Readiness (STAAR®) would be administered to students in the middle school advanced mathematics program at the end of the year.

**Response.** This comment is outside the scope of the proposed rulemaking.

**Comment.** A teacher expressed concern about the inclusion of student expectations from the Grade 8 TEKS in the proposed TEKS for the Grade 8, Middle School Advanced Mathematics, Algebra course, which would limit advanced mathematics students to taking the Grade 7 STAAR® test in Grade 7. The commenter stated that all the Grade 8 TEKS should be compacted into the Grade 7, Middle School Advanced Mathematics course.

**Response.** The SBOE disagrees and has determined that incorporating certain student expectations from the Grade 8 mathematics TEKS is appropriate and scaffolds middle school students' transition into Algebra I content in Grade 8. The SBOE also provides the following clarification. The assessment a student takes is a local school system decision.

**Comment.** A teacher stated that under the proposed new TEKS, students would be skipping the difficult and important Grade 7 STAAR® assessment.

**Response.** This comment is outside the scope of the proposed rulemaking. The assessment a student takes is determined by the local school system.

**Comment.** Two administrators and a community member asked if new STAAR® assessments would be developed for the proposed middle school advanced mathematics courses.

**Response.** This comment is outside the scope of the proposed rulemaking.

**Comment.** A teacher expressed concern that the arrangement of the student expectations in the middle school advanced mathematics TEKS may negatively impact student success on the STAAR® assessments.

**Response.** The SBOE disagrees and has determined that the arrangement of the student expectations in the middle school advanced mathematics TEKS are appropriate as proposed and should not negatively impact performance on the STAAR® assessment.

**Comment.** Two administrators expressed concern regarding the inclusion of circle graphs in the proposed student expectation in 19 TAC §111.29(c)(14)(D).

**Response.** The SBOE disagrees and has determined that circle graphs are appropriately included in the student expectation in 19 TAC §111.29(c)(14)(D).

**Comment.** Three administrators asked whether proposed new 19 TAC §111.31, Grade 8, Middle School Advanced Mathematics, Algebra, could be retitled to ensure that students would take the Algebra I end-of-course exam and receive credit for Algebra I.

**Response.** The SBOE agrees that additional clarification to the title for the Grade 8 middle school advanced mathematics standards is warranted and took action to amend the title for 19 TAC §111.31 to read Grade 8, Middle School Advanced Mathematics, Algebra I.

**Comment.** A teacher expressed concern with the policy for automatic enrollment of Grade 5 students in a middle school advanced mathematics program. The teacher stated that parents do not understand that they must opt their child out of the program and there are already students who struggled in advanced mathematics programs and have since opted out.

**Response.** This comment is outside the scope of the proposed rulemaking. The requirement for automatic enrollment of certain students in middle school advanced mathematics is a statutory requirement.

**Comment.** An administrator stated that the re-wording of the TEKS for the advanced mathematics courses may cause confusion for teachers who teach both on-level and advanced courses.

**Response.** The SBOE disagrees and has determined that the wording in the TEKS for the proposed middle school advanced mathematics courses is sufficiently clear.

**Comment.** An administrator asked why districts were not given the decision on how to split the Grade 7 TEKS between Grade 6 and Grade 7.

**Response.** The SBOE provides the following clarification. The proposed middle school advanced mathematics TEKS for Grades 6, 7, and 8 are optional. School districts maintain the ability to create and offer locally developed courses and make decisions to arrange the TEKS in their middle school advanced mathematics programs differently.

**Comment.** A teacher asked why there is a push to get the middle school advanced mathematics TEKS adopted if they are optional.

**Response.** The SBOE provides the following clarification. Beginning with the 2024-2025 school year, all school systems are required to offer a middle school advanced mathematics program that prepares students to enroll in Algebra I in Grade 8 in accordance with TEC, §28.029. The middle school advanced mathematics TEKS provide an option that districts can use to meet the requirement in state law that is already in effect. The adoption of these TEKS will enable the SBOE to call for instructional materials to support implementation of middle school advanced mathematics.

**Comment.** A teacher asked how an optional set of standards helps transient students.

**Response.** The SBOE provides the following clarification. The middle school advanced mathematics TEKS provide an option that districts can use to meet the requirement in state law that all school systems offer a middle school advanced mathematics program that prepares students to enroll in Algebra I in Grade 8. If a transient student moves from one school system that implements these standards to another school system that implements these standards, the student is less likely to experience disruption in learning.

Comment. An administrator stated there is a lack of clarity in the proposed rules. The administrator suggested revising the phrase "may be implemented" in the general requirements in §111.29(a) to read, "The provisions of this section are one option districts may use to implement Texas Education Code, §28.029."

Response. The SBOE disagrees that the suggested revision is necessary and has determined that the general requirements in §111.29(a) are sufficiently clear as proposed.

Comment. An administrator asked whether the proposed new TEKS for middle school advanced mathematics would replace Accelerated Math 6/7 and Accelerated Math 7/8 and Algebra I in their district.

Response. The SBOE provides the following clarification. The proposed middle school advanced mathematics TEKS for Grades 6, 7, and 8 may be implemented by school districts beginning with the 2025-2026 school year. Districts have the option to implement the new middle school advanced mathematics TEKS or to create or continue to offer their own locally developed middle school advanced mathematics courses.

Comment. An administrator stated it is important for students to have the opportunity to enroll in Algebra I as eighth graders.

Response. The SBOE agrees and took action to adopt proposed TEKS for middle school advanced mathematics that prepare students for Algebra I in Grade 8 that districts may offer beginning with the 2025-2026 school year as part of their middle school advanced mathematics programs.

Comment. A teacher stated that students should be taught all the TEKS as they are necessary for student success.

Response. The SBOE agrees that all the knowledge and skills in the existing mathematics TEKS for Grades 6-8 are necessary for student success. However, the SBOE has determined that there are certain student expectations that can be combined with or subsumed into more advanced student expectations to compact instruction for an accelerated mathematics program that prepares students to take Algebra I in Grade 8.

Comment. A teacher provided a copy of the TEKS breakdown the teacher uses with honors middle school students on an accelerated mathematics pathway.

Response. The SBOE provides the following clarification. The proposed middle school advanced mathematics TEKS for Grades 6-8 are optional standards that school systems may use as part of their middle school advanced mathematics programs. School systems have the option to implement the new middle school advanced mathematics TEKS or to create or continue to offer their own locally developed middle school advanced mathematics courses.

Comment. A teacher expressed concern that there are too many student expectations in the proposed TEKS for Grade 7.

Response. The SBOE disagrees and has determined that the number of student expectations in the proposed TEKS for Grade 7 is appropriate as proposed.

Comment. Two administrators stated that Algebra I should remain the same course as is currently listed in 19 TAC §111.39 whether it is taught in Grade 8 or 9.

Response. The SBOE agrees that the existing high school course, §111.39, Algebra I, is an appropriate and rigorous option for both high school and certain middle school students. However, the SBOE disagrees that §111.39, Algebra I, should be

the only option for Grade 8 students in middle school advanced mathematics programs. The SBOE took action to approve for adoption new TEKS for Grade 8, Middle School Advanced Mathematics, Algebra, that includes and scaffolds Algebra I content with certain Grade 8 student expectations. In response to other comments, the SBOE took action to retitle Grade 8, Middle School Advanced Mathematics, Algebra, as Grade 8, Middle School Advanced Mathematics, Algebra I, to clarify that the course fulfills the graduation requirement for Algebra I.

Comment. A community member stated that high-quality instructional materials are needed for the proposed TEKS and will support these efforts.

Response. This comment is outside the scope of the proposed rulemaking.

Comment. An administrator recommended that if language is changed to add clarity for the advanced mathematics courses, the language should be revised in the on-level TEKS, too.

Response. This comment is outside the scope of the proposed rulemaking. The existing on-level TEKS for Grades 6-8 are not included in the proposed rulemaking.

Comment. Two administrators and a community member stated that some standards were missing from the proposed middle school advanced mathematics courses.

Response. The SBOE disagrees and has determined that all the middle school mathematics standards for Grades 6, 7, and 8 are addressed in the middle school advanced mathematics TEKS. The SBOE provides the following clarification. The student expectations in the middle school advanced mathematics TEKS are either identical to the student expectations in the existing on-level TEKS, have minor revisions, or have been subsumed into similar standards that meet or exceed the knowledge and skills of the original student expectation.

Comment. A teacher and an administrator stated that renumbering student expectations in the middle school advanced mathematics courses causes confusion for teachers who teach both on-level and advanced courses and would have a negative impact on reporting, analyzing, and acting upon data on campus, district, and STAAR® assessments.

Response. The SBOE disagrees and has determined that renumbering student expectations to reflect the order in which they appear in the proposed middle school advanced mathematics courses would not cause confusion and is necessary and appropriate as proposed.

Comment. A teacher stated that there is not sufficient time to teach probability before STAAR®, but it is heavily tested on the Texas Success Initiative assessment for college admission.

Response. This comment is outside the scope of the proposed rulemaking.

Comment. An administrator asked whether there will be new student expectations within the proposed new courses.

Response. The SBOE provided the following clarification. There are no new knowledge and skills statements in the proposed middle school advanced mathematics TEKS. Some student expectations from the student expectations in the existing on-level mathematics TEKS have been subsumed into other student expectations or rearranged, but no new student expectations or knowledge and skills have been added.

Comment. A teacher stated that some Grade 7 student expectations can completely replace Grade 6 student expectations.

Response. The SBOE agrees that some Grade 7 student expectations can replace Grade 6 student expectations if the knowledge and skills are fully addressed. The SBOE took action to subsume certain student expectations from the on-level Grade 6 TEKS in mathematics into similar student expectations in Grade 7 to compact instruction and avoid duplication.

Comment. A teacher stated that instead of teaching the student expectation in §111.26(b)(2)(A) in the current Grade 6 TEKS, natural numbers could be added and taught within the student expectation in §111.27(b)(2)(A) in Grade 7.

Response. The SBOE disagrees and has determined that the student expectation in §111.26(b)(2)(A) related to natural numbers is appropriately included in the proposed new TEKS for §111.29, Grade 6, Middle School Advanced Mathematics.

Comment. A teacher stated that two-step equations and inequalities can be taught instead of one-step equations and inequalities in Grade 6.

Response. The SBOE agrees and has determined that both two-step equations and inequalities and one-step equations and inequalities should be taught in Grade 6.

Comment. A teacher recommended including "comparing data representations" with the different types of graphs already covered in Grade 6.

Response. The SBOE disagrees and has determined the addition of "comparing data representations" with the different types of graphs already covered in Grade 6, Middle School Advanced Mathematics TEKS, is unnecessary.

Comment. A teacher stated that in addition to using frequency percent bars in Grade 6, circle graphs can be taught as another representation of the same thing.

Response. The SBOE disagrees and has determined that introducing circle graphs and frequency percent bars separately provides more opportunity to practice percents and is appropriate as proposed.

Comment. An administrator and community member expressed support for the addition of the middle school advanced mathematics TEKS.

Response. The SBOE agrees and took action to approve proposed new §§111.29-111.31. In response to other comments, the SBOE took action to amend the course title and clarify language in the general requirements in the Grade 8, Middle School Advanced Mathematics, Algebra, TEKS and to clarify language in one student expectation in the Grade 7, Middle School Advanced Mathematics TEKS.

Comment. An administrator and community member asked if students who complete the Grade 6, Middle School Advanced Mathematics course should automatically advance into the Grade 7, Middle School Advanced Mathematics course.

Response. The SBOE provides the following clarification. Grade placement is a local decision and should be based on demonstrated proficiency; however, advancing a student from Grade 6, Middle School Advanced Mathematics course to the Grade 7, Middle School Advanced Mathematics course would be appropriate.

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; and TEC, §28.029, which requires school districts and open-enrollment charter schools to develop an advanced mathematics program for middle school students that is designed to enable those students to enroll in Algebra I in Grade 8.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4), 28.002(a) and (c), and 28.029.

§111.30. *Grade 7, Middle School Advanced Mathematics, Adopted 2025.*

(a) Implementation. The provisions of this section may be implemented by school districts beginning with the 2025-2026 school year.

(b) Introduction.

(1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on computational thinking, mathematical fluency, and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.

(2) The process standards describe ways in which students are expected to engage in the content. The placement of the process standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, algorithms, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, computer programs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(3) To increase the number of students who complete advanced mathematics courses in high school, the middle school advanced mathematics courses are designed to enable students to complete Algebra I by the end of Grade 8.

(4) The primary focal areas in Grade 7, Middle School Advanced Mathematics are numeracy; proportionality; expressions, equations, and relationships; and data science. Students use concepts, al-

gorithms, and properties of real numbers to explore mathematical relationships and to describe increasingly complex situations. Students use concepts of proportionality to explore, develop, and communicate mathematical relationships, including number, geometry and measurement, and statistics and probability. Students use algebraic thinking to describe how a change in one quantity in a relationship results in a change in the other. Students connect verbal, numeric, graphic, and symbolic representations of relationships, including equations and inequalities. Students continue to develop a foundational understanding of functions. Students use geometric properties and relationships, as well as spatial reasoning, to model and analyze situations and solve problems. Students communicate information about geometric figures or situations by quantifying attributes, generalize procedures from measurement experiences, and use the procedures to solve problems. Students use appropriate statistics, representations of data, and reasoning to draw conclusions, evaluate arguments, and make recommendations. The use of technology, including graphing tools, is essential in middle school advanced mathematics courses to master algebra readiness skills by bridging conceptual understanding and procedural fluency.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

(A) apply mathematics to problems arising in everyday life, society, and the workplace;

(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;

(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;

(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;

(E) create and use representations to organize, record, and communicate mathematical ideas;

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(2) Numeracy--foundations of real numbers. The student applies mathematical process standards to represent and use real numbers in a variety of forms. The student is expected to:

(A) extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers;

(B) approximate the value of an irrational number, including  $\pi$  and square roots of numbers less than 225, and locate that rational number approximation on a number line;

(C) convert between standard decimal notation and scientific notation; and

(D) order a set of real numbers arising from mathematical and real-world contexts.

(3) Numeracy--operations with rational numbers. The student applies mathematical process standards to add, subtract, multiply, and divide while solving problems and justifying solutions. The student is expected to:

(A) add, subtract, multiply, and divide rational numbers fluently; and

(B) apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers.

(4) Numeracy--applications of percents. The student applies mathematical process standards to represent and solve problems involving percents as proportional relationships. The student is expected to:

(A) solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems;

(B) calculate and compare simple interest and compound interest earnings;

(C) analyze and compare monetary incentives, including sales, rebates, and coupons;

(D) solve real-world problems comparing how interest rate and loan length affect the cost of credit;

(E) calculate the total cost of repaying a loan, including credit cards and easy access loans, under various rates of interest and over different periods using an online calculator;

(F) explain how small amounts of money invested regularly, including money saved for college and retirement, grow over time; and

(G) estimate the cost of a two-year and four-year college education, including family contribution, and devise a periodic savings plan for accumulating the money needed to contribute to the total cost of attendance for at least the first year of college.

(5) Proportionality--geometric ratios. The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships such as dilations. The student is expected to:

(A) describe  $\pi$  as the ratio of the circumference of a circle to its diameter;

(B) generalize the critical attributes of similarity, including ratios within and between similar shapes;

(C) solve mathematical and real-world problems involving similar shape and scale drawings;

(D) compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane; and

(E) use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation.

(6) Proportionality--probability. The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships. The student is expected to:

(A) represent sample spaces for simple and compound events using lists and tree diagrams;

(B) select and use different simulations to represent simple and compound events with and without technology;

(C) make predictions and determine solutions using experimental data for simple and compound events;

(D) make predictions and determine solutions using theoretical probability for simple and compound events;

(E) find the probabilities of a simple event and its complement and describe the relationship between the two;

(F) solve problems using qualitative and quantitative predictions and comparisons from simple experiments; and

(G) determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces.

(7) One-variable expressions, equations, and relationships--applications of one-variable relationships. The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. The student is expected to:

(A) represent solutions for one-variable, two-step inequalities on number lines;

(B) model and solve one-variable, two-step inequalities;

(C) write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants;

(D) write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants; and

(E) model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants.

(8) Two-variable equations and relationships--foundations of linear relationships. The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. The student is expected to:

(A) determine the constant of proportionality ( $k = y/x$ ) within mathematical and real-world problems;

(B) distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form  $y = kx$  or  $y = mx + b$ , where  $b \neq 0$ ; and

(C) identify examples of proportional and non-proportional relationships that arise from mathematical and real-world problems.

(9) Two-variable equations and relationships--applications of linear relationships. The student applies mathematical process standards to represent linear relationships using multiple representations. The student is expected to represent linear proportional and non-proportional relationships using verbal descriptions, tables, graphs, and equations that simplify to the form  $y = mx + b$ .

(10) Geometric expressions, equations, and relationships--foundations of geometric concepts. The student applies mathematical process standards to develop geometric relationships and solve problems. The student is expected to:

(A) use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas;

(B) solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net;

(C) describe the volume formula  $V = Bh$  of a cylinder in terms of its base area and its height;

(D) model the relationship between the volume of a rectangular prism and a rectangular pyramid having both congruent bases and heights and connect that relationship to the formulas;

(E) explain verbally and symbolically the relationship between the volume of a triangular prism and a triangular pyramid having both congruent bases and heights and connect that relationship to the formulas;

(F) model the relationship between the volume of a cylinder and a cone having both congruent bases and heights and connect that relationship to the formulas;

(G) use models and diagrams to explain the Pythagorean theorem; and

(H) use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

(11) Geometric expressions, equations, and relationships--applications of geometric concepts. The student applies mathematical process standards to solve geometric problems. The student is expected to:

(A) determine the circumference and area of circles;

(B) determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles;

(C) use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders;

(D) solve problems involving the volume of rectangular pyramids and triangular pyramids;

(E) solve problems involving the volume of cylinders, cones, and spheres;

(F) use the Pythagorean theorem and its converse to solve problems; and

(G) determine the distance between two points on a coordinate plane using the Pythagorean theorem.

(12) Geometric expressions, equations, and relationships--transformations. The student applies mathematical process standards to develop transformational geometry concepts. The student is expected to:

(A) generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane;

(B) differentiate between transformations that preserve congruence and those that do not;

(C) explain the effect of translations, reflections over the  $x$ - or  $y$ -axis, and rotations limited to  $90^\circ$ ,  $180^\circ$ ,  $270^\circ$ , and  $360^\circ$

as applied to two-dimensional shapes on a coordinate plane using an algebraic representation; and

(D) model the effect on linear and area measurements of dilated two-dimensional shapes.

(13) Data science--applications of measurement and data. The student applies mathematical process standards to use statistical representations and procedures to analyze and describe data. The student is expected to:

(A) use data from a random sample to make inferences about a population;

(B) compare two populations based on data in random samples from these populations, including informal comparative inferences about differences between the two populations;

(C) simulate generating random samples of the same size from a population with known characteristics to develop the notion of a random sample being representative of the population from which it was selected; and

(D) determine the mean absolute deviation and use this quantity as a measure of the average distance data are from the mean using a data set of no more than 10 data points.

(14) Personal financial literacy--money management. The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor. The student is expected to:

(A) identify the components of a personal budget, including income; planned savings for college, retirement, and emergencies; taxes; and fixed and variable expenses, and calculate what percentage each category comprises of the total budget;

(B) use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby; and

(C) analyze situations to determine if they represent financially responsible decisions and identify the benefits of financial responsibility and the costs of financial irresponsibility.

§111.31. *Grade 8, Middle School Advanced Mathematics, Algebra I (One Credit), Adopted 2025.*

(a) Implementation. The provisions of this section may be implemented by school districts beginning with the 2025-2026 school year.

(b) General requirements. This course is recommended for students in Grade 8. Prerequisite: Middle School Advanced Mathematics, Grade 7 or Mathematics, Grade 8. Students shall be awarded one credit that satisfies the Algebra I requirement for high school graduation. This course satisfies the requirement for any course which identifies Algebra I as a prerequisite.

(c) Introduction.

(1) The desire to achieve educational excellence is the driving force behind the Texas essential knowledge and skills for mathematics, guided by the college and career readiness standards. By embedding statistics, probability, and finance, while focusing on fluency and solid understanding, Texas will lead the way in mathematics education and prepare all Texas students for the challenges they will face in the 21st century.

(2) The process standards describe ways in which students are expected to engage in the content. The placement of the process

standards at the beginning of the knowledge and skills listed for each grade and course is intentional. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use mathematics efficiently and effectively in daily life. The process standards are integrated at every grade level and course. When possible, students will apply mathematics to problems arising in everyday life, society, and the workplace. Students will use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Students will select appropriate tools such as real objects, manipulatives, paper and pencil, and technology and techniques such as mental math, estimation, number sense, and generalization and abstraction to solve problems. Students will effectively communicate mathematical ideas, reasoning, and their implications using multiple representations such as symbols, diagrams, graphs, and language. Students will use mathematical relationships to generate solutions and make connections and predictions. Students will analyze mathematical relationships to connect and communicate mathematical ideas. Students will display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(3) To increase the number of students who complete advanced mathematics courses in high school, the middle school advanced mathematics courses are designed to enable students to complete Algebra I by the end of Grade 8.

(4) In Grade 8, Middle School Advanced Mathematics, Algebra I, students will build on the knowledge and skills for mathematics in Middle School Advanced Mathematics, Grades 6 and 7, which provide a foundation in linear relationships, number and operations, and proportionality. Students will study linear, quadratic, and exponential functions and their related transformations, equations, and associated solutions. Students will connect functions and their associated solutions in both mathematical and real-world situations. Students will use technology to collect and explore data and analyze statistical relationships. In addition, students will study polynomials of degree one and two, radical expressions, sequences, and laws of exponents. Students will generate and solve linear systems with two equations and two variables and will create new functions through transformations. The use of technology, including graphing tools, is essential in Grade 8, Middle School Advanced Mathematics, Algebra I, to bridge conceptual understanding and procedural fluency.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

(A) apply mathematics to problems arising in everyday life, society, and the workplace;

(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;

(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;

(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;

(E) create and use representations to organize, record, and communicate mathematical ideas;

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(2) Linear functions, equations, and inequalities. The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:

(A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations, both continuous and discrete; and represent domain and range using inequalities;

(B) write linear equations in two variables in various forms, including  $y = mx + b$ ,  $Ax + By = C$ , and  $y - y_1 = m(x - x_1)$ , given one point and the slope and given two points;

(C) write linear equations in two variables given a table of values, a graph, and a verbal description;

(D) write and solve equations involving direct variation;

(E) write the equation of a line that contains a given point and is parallel to a given line;

(F) write the equation of a line that contains a given point and is perpendicular to a given line;

(G) write an equation of a line that is parallel or perpendicular to the  $x$ - or  $y$ -axis and determine whether the slope of the line is zero or undefined;

(H) write linear inequalities in two variables given a table of values, a graph, and a verbal description; and

(I) write systems of two linear equations given a table of values, a graph, and a verbal description.

(3) Linear functions, equations, and inequalities. The student applies the mathematical process standards when using graphs of linear functions, key features, and related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to:

(A) use similar right triangles to develop an understanding that slope,  $m$ , given as the rate comparing the change in  $y$ -values to the change in  $x$ -values,  $(y_2 - y_1)/(x_2 - x_1)$ , is the same for any two points  $(x_1, y_1)$  and  $(x_2, y_2)$  on the same line;

(B) graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship;

(C) determine the slope of a line given a table of values, a graph, two points on the line, and an equation written in various forms, including  $y = mx + b$ ,  $Ax + By = C$ , and  $y - y_1 = m(x - x_1)$ ;

(D) calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems;

(E) use data from a table or graph to determine the rate of change or slope and  $y$ -intercept in mathematical and real-world problems;

(F) graph linear functions on the coordinate plane and identify key features, including  $x$ -intercept,  $y$ -intercept, zeros, and slope, in mathematical and real-world problems;

(G) graph the solution set of linear inequalities in two variables on the coordinate plane;

(H) determine the effects on the graph of the parent function  $f(x) = x$  when  $f(x)$  is replaced by  $af(x)$ ,  $f(x) + d$ ,  $f(x - c)$ , and  $f(bx)$  for specific values of  $a$ ,  $b$ ,  $c$ , and  $d$ ;

(I) graph systems of two linear equations in two variables on the coordinate plane and determine the solutions if they exist;

(J) estimate graphically the solutions to systems of two linear equations with two variables in real-world problems; and

(K) graph the solution set of systems of two linear inequalities in two variables on the coordinate plane.

(4) Linear functions, equations, and inequalities. The student applies the mathematical process standards to formulate statistical relationships and evaluate their reasonableness based on real-world data. The student is expected to:

(A) construct a scatterplot and describe the observed data to address questions of association such as linear, non-linear, and no association between bivariate data;

(B) contrast bivariate sets of data that suggest a linear relationship with bivariate sets of data that do not suggest a linear relationship from a graphical representation;

(C) use a trend line that approximates the linear relationship between bivariate sets of data to make predictions;

(D) calculate, using technology, the correlation coefficient between two quantitative variables and interpret this quantity as a measure of the strength of the linear association;

(E) compare and contrast association and causation in real-world problems; and

(F) write, with and without technology, linear functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems.

(5) Linear functions, equations, and inequalities. The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions. The student is expected to:

(A) solve linear equations in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides;

(B) solve linear inequalities in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides; and

(C) solve systems of two linear equations with two variables for mathematical and real-world problems.

(6) Quadratic functions and equations. The student applies the mathematical process standards when using properties of quadratic functions to write and represent in multiple ways, with and without technology, quadratic equations. The student is expected to:

(A) determine the domain and range of quadratic functions and represent the domain and range using inequalities;

(B) write equations of quadratic functions given the vertex and another point on the graph, write the equation in vertex form ( $f(x) = a(x - h)^2 + k$ ), and rewrite the equation from vertex form to standard form ( $f(x) = ax^2 + bx + c$ ); and

(C) write quadratic functions when given real solutions and graphs of their related equations.

(7) Quadratic functions and equations. The student applies the mathematical process standards when using graphs of quadratic functions and their related transformations to represent in multiple ways and determine, with and without technology, the solutions to equations. The student is expected to:

(A) graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including  $x$ -intercept,  $y$ -intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry;

(B) describe the relationship between the linear factors of quadratic expressions and the zeros of their associated quadratic functions; and

(C) determine the effects on the graph of the parent function  $f(x) = x^2$  when  $f(x)$  is replaced by  $af(x)$ ,  $f(x) + d$ ,  $f(x - c)$ , and  $f(bx)$  for specific values of  $a$ ,  $b$ ,  $c$ , and  $d$ .

(8) Quadratic functions and equations. The student applies the mathematical process standards to solve, with and without technology, quadratic equations and evaluate the reasonableness of their solutions. The student formulates statistical relationships and evaluates their reasonableness based on real-world data. The student is expected to:

(A) solve quadratic equations having real solutions by factoring, taking square roots, completing the square, and applying the quadratic formula; and

(B) write, using technology, quadratic functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems.

(9) Exponential functions and equations. The student applies the mathematical process standards when using properties of exponential functions and their related transformations to write, graph, and represent in multiple ways exponential equations and evaluate, with and without technology, the reasonableness of their solutions. The student formulates statistical relationships and evaluates their reasonableness based on real-world data. The student is expected to:

(A) determine the domain and range of exponential functions of the form  $f(x) = ab^x$  and represent the domain and range using inequalities;

(B) interpret the meaning of the values of  $a$  and  $b$  in exponential functions of the form  $f(x) = ab^x$  in real-world problems;

(C) write exponential functions in the form  $f(x) = ab^x$  (where  $b$  is a rational number) to describe problems arising from mathematical and real-world situations, including growth and decay;

(D) graph exponential functions that model growth and decay and identify key features, including  $y$ -intercept and asymptote, in mathematical and real-world problems; and

(E) write, using technology, exponential functions that provide a reasonable fit to data and make predictions for real-world problems.

(10) Number and algebraic methods. The student applies the mathematical process standards and algebraic methods to rewrite in

equivalent forms and perform operations on polynomial expressions. The student is expected to:

(A) add and subtract polynomials of degree one and degree two;

(B) multiply polynomials of degree one and degree two;

(C) determine the quotient of a polynomial of degree one and polynomial of degree two when divided by a polynomial of degree one and polynomial of degree two when the degree of the divisor does not exceed the degree of the dividend;

(D) rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property;

(E) factor, if possible, trinomials with real factors in the form  $ax^2 + bx + c$ , including perfect square trinomials of degree two; and

(F) decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial.

(11) Number and algebraic methods. The student applies the mathematical process standards and algebraic methods to rewrite algebraic expressions into equivalent forms. The student is expected to:

(A) simplify numerical radical expressions involving square roots; and

(B) simplify numeric and algebraic expressions using the laws of exponents, including integral and rational exponents.

(12) Number and algebraic methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:

(A) identify functions using sets of ordered pairs and mappings;

(B) decide whether relations represented verbally, tabularly, graphically, and symbolically define a function;

(C) evaluate functions, expressed in function notation, given one or more elements in their domains;

(D) identify terms of arithmetic and geometric sequences when the sequences are given in function form using recursive processes;

(E) write a formula for the  $n^{\text{th}}$  term of arithmetic and geometric sequences, given the value of several of their terms; and

(F) solve mathematical and scientific formulas, and other literal equations, for a specified variable.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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

The State Board of Education (SBOE) adopts new §§127.59, 127.61, 127.262, 127.263, 127.510, 127.511, 127.569, 127.571, 127.604, 127.689 - 127.691, 127.695 - 127.699, and 127.773, concerning Texas Essential Knowledge and Skills (TEKS) for career development and career and technical education (CTE). The new rules are adopted with changes to the proposed text as published in the December 20, 2024 issue of the *Texas Register* (49 TexReg 10183) and will be republished. The adopted new sections add TEKS for 18 state-approved innovative courses in the following CTE career clusters: agriculture, food, and natural resources; business, marketing, and finance; health science; hospitality and tourism; information technology; and law and public service.

**REASONED JUSTIFICATION:** In 2023, CTE advisory committees were convened to make recommendations for the review and refresh of programs of study as required by the Texas Perkins State Plan. Finalized programs of study were published in the fall of 2023 with an implementation date beginning in the 2024-2025 school year. CTE courses to be developed or revised to complete or update programs of study were determined.

At the April 2024 meeting, the SBOE approved new TEKS for 23 courses in the agribusiness, animal science, plant science, and aviation maintenance programs of study as well as two STEM courses that may satisfy science graduation requirements: Physics for Engineers and Scientific Research and Design. Additionally, Texas Education Agency (TEA) staff shared an overview of upcoming interrelated needs for TEKS review and revision and instructional materials review and approval (IMRA). Staff explained upcoming needs related to development and amendment of CTE courses, made recommendations for completing the work in batches, and recommended including CTE in the next three cycles of IMRA. In 2024, the SBOE began the review of current CTE TEKS, the development of new CTE TEKS, and the review of innovative courses to be approved as TEKS for courses in the new engineering program of study. At the June 2024 meeting, the SBOE approved recommendations that TEA present certain innovative courses with minor edits for consideration for adoption as TEKS-based courses. A discussion item was presented to the Committee of the Full Board at the September 2024 SBOE meeting regarding proposed new TEKS for courses in the following CTE career clusters: agriculture, food, and natural resources; business, marketing, and finance; health science; hospitality and tourism; information technology; and law and public service.

The adopted new sections ensure the standards for CTE programs of study remain current and support relevant and meaningful programs of study.

The following changes were made to the rules since published as proposed.

### *Chapter 127, Subchapter C*

New subsection (a)(2) was added in §127.59 and §127.61 to reference the employability skills in new §127.15.

Section 127.59(c)(4) and §127.61(c)(4) were amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations."

Section 127.59(d)(1) and §127.61(d)(1) related to employability skills were deleted since a new section on employability skills is being adopted in §127.15.

Section 127.61(d)(9) was amended to read, "The student demonstrates an in-depth understanding of beekeeping, bee hauling, and honey processing businesses, including production, processing, marketing, sales, and distribution."

Section 127.61(d)(9)(A) was amended to read, "describe the roles of an entrepreneur in beekeeping, bee hauling, and honey processing operations."

Section 127.61(d)(9)(B) was amended by inserting "bee and" before "honey businesses."

Section 127.61(d)(11)(B) was amended to read, "explain how distribution can add value to goods and services, which can be protected by intellectual property."

### *Chapter 127, Subchapter F*

New subsection (a)(2) was added in §127.262 and §127.263 to reference the employability skills in new §127.15.

Section 127.262(c)(4) and §127.263(c)(4) were amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations."

Section 127.263(b) was amended by adding a prerequisite of at least one credit in a course from the Business, Marketing, and Finance Career Cluster.

### *Chapter 127, Subchapter J*

New subsection (a)(2) was added in §127.510 and §127.511 to reference the employability skills in new §127.15.

Section 127.510(c)(4) and §127.511(c)(4) were amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations."

Section 127.510(d)(1) and §127.511(d)(1) related to employability skills were deleted since a new section on employability skills is being adopted in §127.15.

Section 127.511(b) was amended by adding a prerequisite of at least one credit in a course from the Health Science Career Cluster.

### *Chapter 127, Subchapter K*

New subsection (a)(2) was added in §§127.569, 127.571, and 127.604 to reference the employability skills in new §127.15.

Sections 127.569(c)(4), 127.571(c)(4), and 127.604(c)(4) were amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership

and career development in the profession such as student chapters of related professional associations."

The section title for §127.571 was amended to remove the phrase "Introduction to."

Section 127.571(b) was amended by adding a prerequisite of at least one credit in a course from the Hospitality and Tourism Career Cluster.

Section 127.571(c)(3) was modified by updating the course title to "Event and Meeting Planning."

Section 127.571(d)(1) and §127.604(d)(1) related to employability skills were deleted since a new section on employability skills is being adopted in §127.15.

Section 127.604(b) was amended to read, "General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: a minimum of two credits with at least one credit in a Level 2 or higher course from the Hospitality and Tourism Career Cluster. Recommended prerequisite: Event and Meeting Planning. Students shall be awarded two credits for successful completion of this course."

#### *Chapter 127, Subchapter M*

New subsection (a)(2) was added in §§127.689-127.691 and 127.695-127.699 to reference the employability skills in new §127.15.

Section 127.689(b) was amended to read, "General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit from a course in computer science, programming, software development, or networking systems. Students shall be awarded one credit for successful completion of this course."

Sections 127.689(c)(4), 127.690(c)(4), 127.691(c)(4), 127.695(c)(4), 127.696(c)(4), 127.697(c)(4), 127.698(c)(4), and 127.699(c)(4) were amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations."

Sections 127.689(d)(1), 127.690(d)(1), 127.691(d)(1), 127.695(d)(1), 127.696(d)(1), 127.697(d)(1), 127.698(d)(1), and 127.699(d)(1) related to employability skills were deleted since a new section on employability skills is being adopted in §127.15.

Section 127.691(b) was amended to read, "General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Foundations of User Experience. Students shall be awarded one credit for successful completion of this course."

Sections 127.695(b), 127.696(b), and 127.699(b) were amended by adding a prerequisite of at least one credit in a course from the Information Technology Career Cluster.

Section 127.696(d)(6)(A) and (9)(A) were modified by removing the word "and" and replacing it with the word "or."

Section 127.696(d)(10)(C) was modified by removing the phrase "distance and brightness ranges."

Section 127.696(d)(11)(H) was modified by removing the second instance of the word "to."

#### *Chapter 127, Subchapter N*

New subsection (a)(2) was added in §127.773 to reference the employability skills in new §127.15.

Section 127.773(b) was amended by adding a prerequisite of at least one credit in a course from the Law and Public Service Career Cluster.

Section 127.773(c)(4) was amended to read, "Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations."

Section 127.773(d)(1) related to employability skills was deleted since a new section on employability skills is being adopted in §127.15.

Section 127.773(d)(2) was amended to read, "The student prepares, drafts, and defends legal arguments."

Section 127.773(d)(2)(D) was amended to read, "develop arguments based on research, relevant case law, statutes, and public policy."

Section 127.773(d)(3) was amended to read, "The student understands, prepares, and drafts legal documents."

Section 127.773(d)(3)(B) was amended to read, "prepare and draft legal briefs that include standard elements, including an introduction, table of authorities, brief answer, introduction, argument, counter-argument, and conclusion."

Section 127.773(d)(3)(C) was amended to read, "prepare and draft memoranda that follow a standard legal format."

Section 127.773(d)(3)(D) was amended by adding "and draft" after "prepare."

Section 127.773(d)(4)(A) was amended to read, "analyze the relationship between the U.S. Constitution, Common Law, state law(s), and local law(s)."

Section 127.773(d)(4)(D) was amended by adding the word "as" after "such."

Section 127.773(d)(5)(A) was amended by adding "and evaluate" after "research."

The SBOE approved the new rules for first reading and filing authorization at its November 22, 2024 meeting and for second reading and final adoption at its April 11, 2025 meeting.

In accordance with TEC, §7.102(f), the SBOE approved the new rules for adoption by a vote of two-thirds of its members to specify an effective date earlier than the beginning of the 2025-2026 school year. The earlier effective date will enable districts to begin preparing for implementation of the revised agriculture, food, and natural resources; business, marketing, and finance; health science; hospitality and tourism; information technology; and law and public service TEKS. The effective date is August 1, 2025.

**SUMMARY OF COMMENTS AND RESPONSES:** The public comment period on the proposal began December 20, 2024, and ended at 5:00 p.m. on January 21, 2025. The SBOE also provided an opportunity for registered oral and written comments at its January 2025 meeting in accordance with the SBOE board operating policies and procedures. Following is a summary of the public comments received and corresponding responses.

**Comment.** One individual from a university/college expressed support for the proposed new Texas Essential Knowledge and

Skills (TEKS) in §127.696, Engineering Applications of Computer Science Principles. The commenter stated that the revisions to the original innovative course are a clear improvement.

Response. The SBOE agrees and took action to adopt the proposed new TEKS for §127.696. Additional changes were made to the course in response to other comments.

Comment. One individual from a university/college recommended revising the student expectation in §127.696(7)(A) by replacing the phrase "write and perform" with "write or perform." The commenter explained that it isn't always feasible, necessary, or efficient to write a test when determining functionality.

Response. The SBOE agrees and took action to amend §127.696(7)(A) by replacing the phrase "write and perform" with the phrase "write or perform."

Comment. One individual from a university/college recommended revising the student expectation in §127.696(10)(A) by replacing the phrase "apply mathematical concepts from algebra, geometry, trigonometry, and calculus in a program" with "apply mathematical concepts from algebra, geometry, trigonometry, or calculus in a program." The commenter explained that Algebra I is the only prerequisite for the course so more advanced skills should be optional.

Response. The SBOE agrees and took action to amend §127.696(10)(A) by replacing the phrase "apply mathematical concepts from algebra, geometry, trigonometry, and calculus in a program" with "apply mathematical concepts from algebra, geometry, trigonometry, or calculus in a program."

Comment. One individual from a university/college recommended revising the student expectation in §127.696(11)(C) by removing the phrase "distance and brightness ranges." The commenter stated that the phrase is unnecessarily limiting.

Response. The SBOE agrees and took action to amend §127.696(11)(C) by removing the phrase "distance and brightness ranges."

Comment. One individual from a university/college recommended a technical edit for the student expectation in §127.696(12)(H) by removing the word "to" for better readability.

Response. The SBOE agrees and took action to amend §127.696(12)(H) by removing the word "to" for better readability.

Comment. Two parents recommended that the State Board of Education adopt a supply chain management course in the proposed new TEKS. The commenters explained that supply chain management is a critical field that aligns directly with workforce demands and industry priorities in Texas.

Response. This comment is outside the scope of the proposed rulemaking.

## SUBCHAPTER C. AGRICULTURE, FOOD, AND NATURAL RESOURCES

### 19 TAC §127.59, §127.61

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluat-

ing instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; and TEC, §28.025(b-17), which requires the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

*§127.59. Geographic Information Systems for Agriculture (One Credit), Adopted 2025.*

#### (a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Principles of Agriculture, Food, and Natural Resources. Students shall be awarded one credit for successful completion of this course.

#### (c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Agriculture, Food, and Natural Resources career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

(3) Geographic Information Systems for Agriculture is a course designed to provide students with the academic and technical knowledge and skills that are required to pursue a career as a precision agriculture specialist, a crop specialist, an independent crop consultant, a nutrient management specialist, a physical scientist, a precision agronomist, a precision farming coordinator, a research agricultural engineer, or a soil fertility specialist. Students will learn to use computers to develop or analyze maps of remote sensing to compare physical topography with data on soils, fertilizer, pests, or weather.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student develops a supervised agriculture experience program. The student is expected to:

(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience as an experiential learning activity;

(B) use appropriate record-keeping skills in a supervised agricultural experience;

(C) participate in youth agricultural leadership opportunities;

(D) review and participate in a local program of activities; and

(E) create or update documentation of relevant agricultural experience such as community service, professional, or classroom experiences.

(2) The student explains the current applications of geographic information system (GIS) in agriculture, food, and natural resources and identifies the future need for GIS in precision agriculture. The student is expected to:

(A) research and compare current and emerging careers related to GIS in agriculture and natural resource fields;

(B) identify and analyze applications of GIS technologies in agriculture, food, and natural resources;

(C) explain GIS data as it pertains to agriculture; and

(D) describe the types of licensing, certification, and credentialing requirements related to GIS occupations.

(3) The student analyzes geographic information and spatial data types in agriculture, food and natural resources. The student is expected to:

(A) identify the uses of GIS in agriculture;

(B) identify the GIS terminology used in agriculture applications, such as spatial analysis, remote sensing, georeferencing, geostatistics, and geocoding;

(C) identify GIS models and representations in precision agriculture;

(D) explain GIS representations of geographic phenomena in soil types, topography, and farming management;

(E) organize and describe spatial data in yield monitoring for crop planning; and

(F) analyze GIS data sources and ethics in agriculture.

(4) The student uses agriculture, food, and natural resources GIS tools. The student is expected to:

(A) identify hardware and software for agriculture data management and processing;

(B) explain spatial data capture and preparation, spatial data storage and maintenance, spatial query and analysis, and spatial data presentation for agriculture; and

(C) describe remote sensing tools and technologies used in precision farming, including unmanned aerial support (UAS), unmanned aerial vehicles (UAV), and global positioning satellite (GPS).

(5) The student integrates spatial referencing and global positioning techniques in agriculture, food, and natural resources. The student is expected to:

(A) explain spatial referencing systems and projections for capturing and displaying agricultural data; and

(B) identify uses for satellite-based positioning to increase agriculture proficiency.

(6) The student evaluates applications for spatial data entry and preparation for agricultural analysis. The student is expected to:

(A) analyze agricultural GIS spatial data; and

(B) explain and analyze data accuracy and precision related to using GIS in agriculture.

(7) The student performs agricultural spatial data analysis. The student is expected to:

(A) analyze GIS maps of agricultural fields to determine variables that would impact maximum crop yields;

(B) compare vector and raster-based data for agricultural analysis; and

(C) explain types of GIS analysis used in natural resource management.

(8) The student creates spatial data visualizations and cartographic models. The student is expected to:

(A) identify types of GIS maps used in agriculture;

(B) develop GIS maps for various types of agricultural data;

(C) identify and explain the purpose of cartographic symbols used in precision farming; and

(D) analyze visual data and explain how the data is used in agricultural decision making.

*§127.61. Beekeeping and Honey Processing (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Principles of Agriculture, Food, and Natural Resources. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Agriculture, Food, and Natural Resources career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

(3) Beekeeping and Honey Processing is a course designed to provide students with the academic and technical knowledge and skills that are required to pursue a career related to beekeeping, apiculture, honey harvesting, and related industries. Beekeeping and honey processing is a vital part of the United States agricultural economy. To prepare for success in Beekeeping and Honey Process-

ing, students need opportunities to learn, reinforce, experience, apply, and transfer their knowledge and skills in a variety of settings.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student develops a supervised agriculture experience program. The student is expected to:

(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience as an experiential learning activity;

(B) use appropriate record-keeping skills in a supervised agricultural experience;

(C) participate in youth agricultural leadership opportunities;

(D) review and participate in a local program of activities; and

(E) create or update documentation of relevant agricultural experience such as community service, professional, or classroom experiences.

(2) The student explores the biology of bee behavior. The student is expected to:

(A) identify different types and life spans of bees;

(B) explain the different roles assumed by the different types of honeybees, including the queen, drones, and workers; and

(C) describe honeybee development, castes, behavior, division of labor, and the bee life cycle, including larval, pupal, and adult stages.

(3) The student analyzes beehive design and development. The student is expected to:

(A) identify the site characteristics required for successful beehive production;

(B) analyze factors such as climatic characteristics and food sources to determine the suitability of a beehive site for honey harvesting and pollination;

(C) research and compare the conditions of successful beehives in other parts of the world with similar local conditions; and

(D) develop a beehive design and installation plan, including consideration of sunlight, access to water, wind, topography, human and animal habitation, and good neighbor policy.

(4) The student evaluates technology and best practices for weatherizing a beehive. The student is expected to:

(A) explain the environmental conditions that lead to bee colonies adapting to extremes in climate conditions;

(B) compare seasonal strategies for proper beehive management and describe why best management practices change based on the seasons, including spring, summer, autumn, and winter; and

(C) explain practices for winterizing hives.

(5) The student demonstrates beehive management techniques. The student is expected to:

(A) identify the tools of an apiarist and demonstrate safe and proper usage of tools;

(B) demonstrate inspection of a beehive and describe necessary equipment, including a bee suit, a smoker, and a comb replacement;

(C) explain beehive training techniques, including diagnosing the brood pattern, adding brood comb to the nest, switching colonies, feeding bees, providing water, removing old combs, extracting honey, and caging queens;

(D) identify safety precautions in the field while handling live bees, caring for the colonies in the hives, and extracting honey and honeycomb;

(E) explain the proper methods of bee handling to prevent harm to handlers and others; and

(F) describe personal protective equipment used to reduce the risk of accidents.

(6) The student develops an integrated pest management plan for beehives. The student is expected to:

(A) identify the major insect pests and diseases of honeybees;

(B) compare the components of honeybee integrated pest management; and

(C) describe the safe usage of pesticides in honeybee hives.

(7) The student examines honey harvesting and the use of proper equipment and tools. The student is expected to:

(A) describe the tools and equipment used in honey production, including a bee brush, fume board, honey drip tray, nectar detector, escape board, and extractor;

(B) explain the safe use of honey harvesting tools;

(C) explain the use of technology in modern honey production systems; and

(D) explain the appropriate procedures used to extract honey.

(8) The student identifies procedures and regulations for sanitation and safety in the food industry. The student is expected to:

(A) identify food industry inspection standards, including hazard analysis and critical control points;

(B) identify the appropriate chemicals used in the food industry, specifically in honey processing;

(C) identify safety and governmental regulations involved in the processing and labeling of foods, including honey;

(D) explain the procedures relating to the safe manufacture of foods through hygienic food handling and processing;

(E) develop and maintain sanitation schedules; and

(F) identify food safety laws that impact the bee industry.

(9) The student demonstrates an in-depth understanding of beekeeping, bee hauling, and honey processing businesses, including production, processing, marketing, sales, and distribution. The student is expected to:

(A) describe the roles of an entrepreneur in beekeeping, bee hauling, and honey processing operations;

(B) differentiate between small, medium, and large-sized bee and honey businesses;

(C) create a list of tools and equipment needed to start a beekeeping operation and develop a budget to start a beekeeping business; and

(D) develop a business model for beekeeping, honey production, and honey processing.

(10) The student completes the process for development, implementation, and evaluation of a marketing plan and a financial forecast for beekeeping. The student is expected to:

(A) identify and explain the target market for honey-related products;

(B) create and conduct a customer survey;

(C) analyze the customer survey results;

(D) identify modification recommendations based on customer survey results;

(E) complete a detailed honey-related products market analysis;

(F) analyze and explain different types of marketing strategies;

(G) describe a social media marketing campaign for honey-processed products; and

(H) develop and explain a projected income statement, cash budget, balance sheet, and projected sources and uses of funds statement.

(11) The student explains the scope and nature of distribution of honey-related products. The student is expected to:

(A) explain effective distribution activities, including transportation, storage, product handling, and inventory control;

(B) explain how distribution can add value to goods and services, which can be protected by intellectual property; and

(C) analyze distribution costs for honey-related products.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## SUBCHAPTER F. BUSINESS, MARKETING, AND FINANCE

### 19 TAC §127.262, §127.263

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; and TEC, §28.025(b-17), which requires the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

§127.262. *Marketing (One Credit)*, Adopted 2025.

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Business, Marketing, and Finance. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Business, Marketing, and Finance Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.

(3) The Marketing course explores the seven core functions of marketing, which include marketing planning -- why target marketing and industry affect businesses; marketing-information management -- why market research is important; pricing -- how prices maximize profit and affect the perceived value; product/service management -- why products live and die; promotion -- how to inform customers about products; channel management -- how products reach the final user; and selling -- how to convince a customer that a product is the best choice. Students will demonstrate knowledge through hands-on projects that may include conducting research, creating a promotional plan, pitching a sales presentation, and introducing an idea for a new product or service.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student defines marketing and identifies the seven core functions of marketing. The student is expected to:

(A) define marketing and explain the marketing concept; and

(B) identify the seven core functions of marketing, including marketing planning, marketing-information management, pricing, product/service management, promotion, channel management, and selling.

(2) The student knows the interrelationship and purpose of the marketing mix or 4P's of marketing: product, price, promotion, and place. The student is expected to:

(A) identify and describe the four elements of the marketing mix, including product, price, place, and promotion;

(B) explain how each component of the marketing mix contributes to successful marketing;

(C) analyze the interdependence of each element of the marketing mix with the other three elements;

(D) develop and present an idea for a new product or service and the marketing mix for the new product or service; and

(E) investigate and explain how to determine the feasibility of a new product or service proposal.

(3) The student knows how a company considers internal and external factors to understand the current market. The student is expected to:

(A) explain the internal and external factors that influence marketing planning;

(B) define a marketing plan and describe each step in the plan;

(C) identify and explain market position and market share;

(D) explain how a business can use a strengths, weaknesses, opportunities, and threats (SWOT) analysis to plan for opportunities in the market;

(E) conduct a SWOT analysis; and

(F) analyze the data from a SWOT analysis to make informed business decisions.

(4) The student applies the concepts of market and market identification to make informed business decisions. The student is expected to:

(A) define the term market;

(B) identify the target market for a product or service;

(C) define niche marketing, identify examples of niche marketing, and compare niche marketing to other marketing strategies;

(D) analyze an appropriate target market within a specific industry;

(E) compare types of markets, including business to business and business to consumer; and

(F) identify real-life scenarios of effective markets and explain what makes a market effective.

(5) The student understands the concept of market segmentation. The student is expected to:

(A) define the term market segmentation;

(B) explain the commonly used types of market segmentation, including demographic segmentation, geographic segmentation, psychographic segmentation, and behavioral segmentation;

(C) analyze the impact of culture on buying decisions; and

(D) describe how market segmentation concepts apply to real-world situations.

(6) The student understands the purpose and importance of gathering and evaluating information for use in making business decisions. The student is expected to:

(A) describe marketing information and how it influences marketing decisions;

(B) use marketing-research tools to gather primary and secondary data;

(C) compare primary and secondary research data;

(D) define analytics;

(E) identify sources of data and information that can be analyzed to make business decisions;

(F) identify key business metrics that are used to make business decisions or evaluate outcomes of business decisions; and

(G) analyze data and make recommendations for improving business operations.

(7) The student explains concepts and strategies used in determining and adjusting prices to maximize return and meet customers' perceptions of value. The student is expected to:

(A) investigate and describe how businesses make pricing decisions;

(B) identify and explain goals for pricing, including profit, market share, and competition;

(C) analyze factors affecting price, including supply and demand, perceived value, costs, expenses (profit margin), and competition;

(D) explain the economic principle of break-even point;

(E) explain key pricing terms, including odd/even pricing, loss leaders, prestige pricing, penetration pricing, price bundling, price lining, and everyday low pricing; and

(F) explain how supply and demand affect price.

(8) The student explains the role of product or service management as a marketing function. The student is expected to:

(A) explain the concept of product mix, including product lines, product width, and product depth;

(B) explain the importance of generating new product ideas;

- (C) analyze the product mix for a current business;
  - (D) identify and discuss the components of the product life cycle, including introduction, growth, maturity, and decline; and
  - (E) identify the impact of marketing decisions made in each stage of the product life cycle.
- (9) The student knows the process and methods to communicate information about products to achieve a desired outcome. The student is expected to:
- (A) explain the role of promotion as a marketing function;
  - (B) identify and describe elements of the promotional mix, including advertising, public relations, personal selling, and sales promotion;
  - (C) describe and demonstrate effective ways to communicate features and benefits of a product to a potential client; and
  - (D) analyze and evaluate websites for effectiveness in achieving a desired outcome.
- (10) The student identifies promotional channels used to communicate with the targeted audiences. The student is expected to:
- (A) create advertising examples using various media, including print media such as outdoor, newspapers, magazines, and direct mail; digital media such as email, apps, and social media; and broadcast media such as television and radio, to communicate with target audiences;
  - (B) describe various public-relations activities such as a press releases and publicity management;
  - (C) analyze and compare examples of sales promotions such as coupons, loyalty programs, rebates, samples, premiums, sponsorship, and product placement; and
  - (D) explain the role of marketing ethics in promotional strategies.
- (11) The student explores the role of channel members and methods of product transportation. The student is expected to:
- (A) define channel of distribution;
  - (B) describe the roles of intermediaries, including manufacturer, agent, wholesaler/industrial distributor, retailer, and consumer/industrial user, and explain how the roles may impact business decisions and the success of a business;
  - (C) identify and discuss the methods of transportation for products, including road, air, maritime, rail, and intermodal; and
  - (D) analyze and explain the impact of the distribution channel on price.
- (12) The student demonstrates how to determine client needs and wants and responds through planned and personalized communication. The student is expected to:
- (A) explain the role of personal selling as a marketing function;
  - (B) explain the role of customer service as a component of selling relationships;
  - (C) explain the importance of preparing for the sale, including gaining knowledge of product features and benefits, identifying the target market and their needs, and overcoming common objections; and

- (D) identify and explain ways to determine needs of customers and their buying behaviors, including emotional, rational, or patronage.
- (13) The student demonstrates effective sales techniques. The student is expected to:
- (A) describe the steps of the selling process such as approaching the customer, determining needs, presenting the product, overcoming objections, closing the sale, and suggestive selling;
  - (B) explain effective strategies and techniques for various sales situations; and
  - (C) develop and pitch a sales presentation for a product or service using the steps of the sales process such as addressing customers' needs, wants, and objections and negotiating the sale.
- (14) The student implements a marketing plan. The student is expected to:
- (A) identify a key target audience;
  - (B) develop an appropriate message and select a medium to attract customers;
  - (C) create a promotional plan that includes target market, promotional objective, advertising media selection, promotional schedule, and budget;
  - (D) develop and present a marketing plan to an audience; and
  - (E) analyze various marketing plans for effectiveness.
- (15) The student knows the nature and scope of project management. The student is expected to:
- (A) investigate and describe the various tools available to manage a project such as a Gantt chart; and
  - (B) define and explain the components of a project plan, including project goals schedule, timeline, budget, human resources, quality management, risk management, monitoring, and controlling a project.
- (16) The student knows the nature and scope of ethics in marketing. The student is expected to:
- (A) analyze and explain the role and use of ethics in marketing;
  - (B) research and discuss how ethics has affected a company's profitability; and
  - (C) describe how marketing ethics can be effectively applied to the decision-making process.
- §127.263. Retail Management (One Credit), Adopted 2025.*
- (a) Implementation.
    - (1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.
    - (2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.
      - (b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit in a course from the Business, Marketing, and Finance Career Cluster. Recommended prerequisite: Principles of Business, Marketing, and Finance. Students shall be awarded one credit for the successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current professions.

(2) The Business, Marketing, and Finance Career Cluster focuses on planning, managing, and performing marketing activities to reach organizational objectives.

(3) Retail Management is designed as a comprehensive introduction to the principles and practices of retail management. The course explores the process of promoting greater sales and customer satisfaction by gaining a better understanding of the consumers of the goods and services provided by a company. The course provides an overview of the strategies involved in the retail process such as distributing finished products created by the business to consumers and determining what buyers want and require from the retail market.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student uses self-development techniques and interpersonal skills to accomplish retail management objectives. The student is expected to:

(A) describe and demonstrate effective interpersonal and team-building skills involving situations with coworkers, managers, and customers;

(B) create a self-development plan that includes improving leadership and interpersonal skills and that identifies opportunities to participate in leadership and career development activities; and

(C) identify and describe employability skills needed to be successful in the retail marketing industry.

(2) The student explores features of excellent customer service. The student is expected to:

(A) discuss the importance of and demonstrate effective communication skills such as active listening, evaluating nonverbal signals, and use of appropriate grammar, vocabulary, and tone;

(B) present written and oral communication, including email, traditional letter writing, face-to-face conversations, and phone conversation, in a clear, concise, and effective manner for a variety of purposes and audiences;

(C) discuss how company policy impacts an employee's interactions with consumers and a consumer's interactions with the retail establishment; and

(D) analyze how attitude impacts a consumer's experience with the retailer.

(3) The student creates professional documents required for employment. The student is expected to:

(A) develop a professional portfolio or resume;

(B) write appropriate business correspondence such as a letter of intent and a thank you letter;

(C) complete sample job applications accurately and effectively; and

(D) explain protocol for identifying and asking for references.

(4) The student analyzes non-store retailing modalities, including direct selling, telemarketing, online retailing, automatic vending, direct marketing, and e-tailing. The student is expected to:

(A) investigate and evaluate the effectiveness of marketing and selling through online platforms such as mobile apps and software applications;

(B) analyze and explain the disadvantages of non-store retailing such as security concerns, inability to interact with the customer, delay in customer receipt of the product, less ease of return for unwanted items, and the lack of social interaction between customers and retailers; and

(C) analyze and explain the advantages of non-store retailing such as unlimited access for customers to view the inventory, the ability for customers to purchase 24 hours per day/7 days a week, lower overhead cost, and a larger inventory of items than is housed in a brick-and-mortar facility.

(5) The student analyzes marketing research to make changes to business strategies or operations. The student is expected to:

(A) synthesize and analyze data collected through surveys, interviews, group discussions, and internal records to create data reports;

(B) explain how data reports are used to make decisions to improve a retailer's practices and improve overall operations;

(C) analyze and evaluate the effective use of surveys to gather data needed by the retailer to make effective operational decisions;

(D) disaggregate and analyze internal data such as sales data, shipping data, finance reports, inventory reports, and customer and personnel feedback collected by the retailer to make effective operational decisions;

(E) disaggregate and analyze marketing data based on indicators such as age, gender, education, employment, income, family status, and ethnicity to identify and evaluate products based on the retailers' target market; and

(F) identify and analyze how the product, price, promotion, and placement of the product impacts the retail market.

(6) The student understands the role and responsibilities of a buyer in retail management and understands the purpose of analyzing the target market to interpret consumer needs and wants based on data. The student is expected to:

(A) define and describe various merchandising categories such as staple, fashion, seasonal, and convenience;

(B) describe merchandise plans and their components, including planned sales, planned stock, planned stocked reductions, and planned retail purchases;

(C) analyze and discuss each stage of a product's life cycle, including introduction, growth, maturity, and decline, and explain how each stage relates to the target market; and

(D) develop a budget based on financial goals.

(7) The student applies inventory management strategies to effectively create and manage reliable tracking systems to schedule purchases, calculate turnover rate, and plan merchandise and marketing decisions. The student is expected to:

(A) describe the process of purchasing inventory and executing a purchase order, transporting orders, and receiving orders;

(B) explain inventory management practices, including ordering, storing, producing, and selling merchandise;

(C) differentiate between perpetual and periodic inventory tracking methods and describe how point-of-sale software, universal product codes, radio frequency identification, stock shrinkage, and loss prevention impact a retailer's inventory management; and

(D) analyze and describe how stock turnover rates impact inventory.

(8) The student evaluates retailer pricing strategies based on factors such as competition, the economy, and supply and demand to maximize sales and profit. The student is expected to:

(A) analyze how uncontrollable factors such as competition, the economy, and supply and demand impact pricing;

(B) explain how controllable factors such as company goals, operating expenses, and product life cycles impact pricing;

(C) differentiate between demand-based pricing, competition-based pricing, and cost-based pricing and explain how each pricing method is used to determine the base price for a product;

(D) identify and describe how market share impacts pricing of products; and

(E) create price points using keystone pricing, industry benchmarks, and industry surveys.

(9) The student explores effective promotional activities, including advertising, sales promotion, public relations, and personal selling, that retail managers use to inform, persuade, and remind customers of products that will meet consumer needs. The student is expected to:

(A) explain the six elements of effective communication, including source, message, channel, environment, context, and feedback;

(B) demonstrate effective written, verbal, and nonverbal communication;

(C) analyze and evaluate promotional communication techniques used to inform or motivate consumers to invest in products or services;

(D) differentiate between techniques used for advertising, public relations, personal selling, and sales promotion; and

(E) investigate and evaluate technology applications that promote items using online advertising, web presence, social media, email campaigns, and other modes of electronic promotions.

(10) The student analyzes and applies personal selling elements needed in retail management to determine how to generate sales. The student is expected to:

(A) explain sales generating techniques, including prospecting, solution development, buyer qualification, opportunity qualification and control, negotiation, and account management and follow-up;

(B) describe how ethical behaviors of a sales associate impacts the retail market;

(C) demonstrate effective selling techniques needed in the retail market;

(D) analyze and describe best practices in product training for sales associates;

(E) explain how determining the needs, presenting the product, handling objections, closing the sale, and following up with customers increases sales for the retailer; and

(F) identify effective questions and questioning techniques sales associates use with consumers to gain a competitive advantage or increase sales and discuss the importance of strategically selecting questions and techniques based on the product or service and target market.

(11) The student explores how to effectively use visual merchandising. The student is expected to:

(A) analyze and describe how a retailer's storefront, store layout, store interior, centralized visual merchandising, and interior displays impact sales and a consumer's experience with the business; and

(B) develop a visual merchandising plan using proper design elements such as mannequins, props, lighting, color, signage, and graphics.

(12) The student understands the role of the retail manager for recruiting, hiring, training, supervising, and terminating employees as well as maintaining the everyday operation of a business to ensure that it functions efficiently and meets established goals. The student is expected to:

(A) identify and describe effective methods of recruiting employees externally;

(B) explain effective methods of recruiting employees internally;

(C) describe how to recruit a diverse pool of talent for employment consideration;

(D) explain the importance of the Equal Employment Opportunity Commission guidelines on the recruitment process;

(E) explain the benefits of training employees to learn new skills and technologies and comply with new laws and regulations;

(F) develop an employee appraisal program;

(G) explain an effective employee performance evaluation system and the importance of including supervisors and managers, peers, customers or clients, and subordinates in the process; and

(H) identify leadership and career development activities such as involvement with appropriate student and local management associations and create a personal development plan that includes participation in leadership and career development activities.

(13) The student understands the importance of effective teams and how effective leaders implement group development strategies. The student is expected to:

(A) explain the process of forming, storming, norming, performing, and adjourning;

(B) analyze and discuss effective interpersonal and team-building skills involving situations with coworkers, supervisors, and subordinates;

(C) investigate and analyze personal integrity and its effects on relationships in the workplace;

(D) describe characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and the ability to accept criticism;

(E) discuss the importance of showing respect to all people and explain how showing respect to all people impacts the success of a business;

(F) identify employer expectations and discuss how meeting employer expectations impacts the success of a business; and

(G) explain and demonstrate productive work habits and attitudes.

(14) The student explores the practice of risk management, including identifying, assessing, and reducing risk through proper planning. The student is expected to:

(A) differentiate between natural, human, market, economic, and market risks;

(B) differentiate between controllable and uncontrollable risks;

(C) investigate and explain effective strategies for identifying, assessing, and reducing risks; and

(D) analyze how financial losses from human, physical, and natural risk factors can be minimized through the use of insurance.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## SUBCHAPTER J. HEALTH SCIENCE

### 19 TAC §127.510, §127.511

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum

under TEC, §28.002; and TEC, §28.025(b-17), which requires the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

§127.510. *Speech and Language Development (One Credit)*, Adopted 2025.

#### (a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Health Science, Anatomy and Physiology, and Introduction to Speech Pathology and Audiology. Students shall be awarded one credit for successful completion of this course.

#### (c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.

(3) The Speech and Language Development course provides advanced knowledge and skills related to speech and language acquisition and growth of developing children. Understanding healthy development and speech, language, and communication developmental milestones is a prerequisite for studying communication disorders. This course provides students with the knowledge and skills necessary to pursue further education, possibly culminating in a bachelor's degree and subsequent master's degree in communication sciences and disorders.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

#### (d) Knowledge and skills.

(1) The student understands basic human communication processes, including the biological, neurological, psychological, developmental, linguistic, and cultural processes. The student is expected to:

(A) differentiate between communication, speech, language, and hearing;

(B) summarize the structural bases of speech production and hearing;

(C) compare anatomy and physiology of the speech mechanism;

(D) examine and describe the anatomy and physiology of the auditory system;

(E) identify and describe healthy verbal and nonverbal communication development;

(F) describe the developmental building blocks and prerequisites for healthy speech and language development;

(G) identify and define terminology related to human communication such as speech sound production, fluency (stuttering), voice, language, hearing, hearing loss, breathing, swallowing, pragmatics, and cognition; and

(H) explain social-interactive and psychological bases of communication and the influences it has on interpersonal communication, including linguistic and cultural influences.

(2) The student gains knowledge and understanding of various theoretical perspectives of healthy speech and language acquisition. The student is expected to:

(A) investigate and explain the major theories of language acquisition;

(B) compare the major theories of speech sound production; and

(C) research and explain the connections between language development and speech development as they relate to phonological awareness in learning to read.

(3) The student understands the healthy development of speech sound production in children. The student is expected to:

(A) describe articulatory phonetics and explain how articulatory phonetics relate to the respiratory system, including the larynx, vocal tract, articulators (velopharynx, tongue, lips, and jaw), and air flow;

(B) analyze the foundation for speech acquisition in relation to auditory perception before birth and in infants;

(C) describe early vocal development in infants as a prerequisite for speech;

(D) explain how the use of vowels by infants and young children is important for the development of speech;

(E) illustrate ways to categorize or describe vowel and diphthong production;

(F) research and describe the development of consonant inventories in young English-speaking children;

(G) describe and differentiate between models for describing consonant production;

(H) summarize progression in speech development for combining sounds into syllable shapes and words; and

(I) analyze the linguistic and cultural influences of the heritage/native language on the development of speech sound production in English.

(4) The student understands the components of a developing language system and how language skills develop in children. The student is expected to:

(A) identify and explain the components of a language system, including phonology, phonetics, morphology, syntax, semantics, and pragmatics;

(B) explain the components of a developing language system in terms of vocabulary, grammar, and social and interpersonal communication;

(C) describe the prerequisite skills for developing language;

(D) differentiate between language delay, language disorders, and language difference;

(E) outline the milestones of healthy language development from birth through age five years related to comprehension and expression;

(F) summarize healthy language development from Kindergarten (age 5) through Grade 5 (age 10 or 11) and describe factors that influence age-appropriate development of language;

(G) describe healthy continuing language development in adolescence for each component of a developing language system; and

(H) compare cultural and ethnic differences in language development.

(5) The student explores the healthy development of verbal fluency skills in children. The student is expected to:

(A) define and differentiate between verbal fluency, disfluencies, and stuttering;

(B) identify and explain common disfluencies and periods of expected disfluencies;

(C) explain the development of speech and language skills;

(D) differentiate between and discuss variables that may affect verbal fluency; and

(E) describe ways to measure verbal fluency for English language learners and evaluate the effectiveness of each method.

(6) The student explores parameters of voice production in children and adults. The student is expected to:

(A) describe the physical and physiological parameters of voice production;

(B) describe the components of healthy voice production, including voice quality, pitch, loudness, resonance, and duration;

(C) explain causes or etiologies of variations in voice production;

(D) describe how parameters of voice production change throughout the span of life;

(E) analyze environmental variables that may affect voice production;

(F) explain the practice of speech-language pathology and allowable services; and

(G) analyze the ethical considerations for the speech-language pathologist in dealing with individuals with a possible voice disorder and the requirement for ongoing work with a physician.

(7) The student understands the development of effective language and communication skills needed to demonstrate high levels of achievement in elementary and secondary school. The student is expected to:

(A) research and describe the milestones of communication development and literacy development;

(B) compare milestones of communication development to the milestones of literacy development;

(C) differentiate between interpersonal language used for conversational interaction and more formal, literate language used for learning academic content;

(D) define and provide examples of tier 1, tier 2, and tier 3 vocabulary as it relates to language development and meeting grade level expectations of academic vocabulary across subject areas;

(E) explain the development of language used for oral and written narratives and demonstrate how story grammar can be used as a bridge between conversational language and academic language;

(F) analyze the development of pragmatic-language skills and the types of verbal, nonverbal, and written communication skills needed to do well in school; and

(G) define emergent literacy and analyze the language base necessary for the development of reading skills.

(8) The student explores healthy and unhealthy speech and language development. The student is expected to:

(A) describe the role of the speech-language pathologist in determining healthy speech and language development and speech sound disorders and language disorders;

(B) explain the purpose of and describe techniques for screening speech and language skills in children;

(C) explain the purpose of and describe techniques for evaluating speech and language skills in children;

(D) analyze the Response to Intervention (RtI) method for accurately identifying a speech or language disorder in school-age children; and

(E) discuss the role of the speech-language pathologist in referral, counseling, and providing basic information when there are concerns about a child's speech or language development.

(9) The student demonstrates effective verbal and nonverbal communication skills. The student is expected to:

(A) describe and demonstrate appropriate communication skills when interacting with elementary age students, classroom teachers, speech-language pathologists, principals, and parents in various situations;

(B) identify and demonstrate verbal and nonverbal communication techniques that should be used when communicating with children who have sensory loss, language barriers, cognitive impairment, and other learning disabilities;

(C) identify and evaluate electronic communication and technology devices that may be used when interacting with children with communication disorders; and

(D) differentiate between oral interpretation and translation skills from English to a second language.

(10) The student explores the influence of dialects of Standard American English or native language on the development of speech and language skills in English and on the production of English. The student is expected to:

(A) provide examples of how a common phrase may be expressed across Standard American English and three different dialects;

(B) describe how speech and language patterns vary as a function of language, age, socioeconomic status, and geography;

(C) analyze the characteristics of American English dialects in terms of speech sound production and language use;

(D) explain the influence of heritage language on the speech sound production and grammar development of English in emergent bilingual students; and

(E) analyze speech and language patterns of English language learners in terms of expected speech and language development.

*§127.511. Speech Communication Disorders (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: at least one credit in a course from the Health Science Career Cluster. Recommended prerequisites: Principles of Health Science, Anatomy and Physiology, Introduction to Speech-Language Pathology and Audiology, Speech and Language Development, and Human Growth and Development. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.

(3) The Speech Communication Disorders course is designed to provide for the development of advanced knowledge and skills related to an overview of communication disorders that occur in children and adults in the areas of speech sound production, stuttering, voice disorders, and the language areas of semantics, syntax, pragmatics, phonology, and metalinguistics. An overview of treatment for hearing loss and deafness will also be provided.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student demonstrates knowledge of the nature of speech, language, hearing, and communication disorders and differences. The student is expected to:

(A) identify the anatomy and describe the function of the peripheral and central auditory pathways;

(B) describe the physical and psychological attributes of sound;

(C) differentiate between the different types of hearing loss and their causes;

(D) describe the impact of hearing loss on speech and language development;

(E) compare the processes of speech, language, and hearing in people of various cultures;

(F) identify and relate disorder differences in relationship to communication skills;

(G) explain the concepts of speech, language, hearing, and communication disorders across the human lifespan; and

(H) explain potential barriers and solutions that an interpreter or translator must consider when communicating with a child with a communication disorder.

(2) The student demonstrates knowledge of the etiologies, characteristics, and anatomical/physical, acoustic, psychological, developmental, linguistic, and cultural correlates of communication disorders across the human lifespan. The student is expected to:

(A) compare common causes of hearing impairment in children and adults;

(B) analyze the causes of speech, language, and hearing disorders across the lifespan;

(C) identify common communication and hearing disorders, their typical symptoms, etiologies, characteristics, and associated correlates;

(D) evaluate the impact of communication disorders on the individual; and

(E) compare cultural variations in how communication disorders are perceived.

(3) The student describes the types of communication disorders most commonly seen in children and the services provided by professionals in this field to provide habilitation or rehabilitation. The student is expected to:

(A) analyze speech sound disorders of the child's phonological system and describe the production of speech sounds such as place, manner, voicing, and distinctive feature analysis;

(B) describe and organize evidence-based treatment approaches for speech sound disorders;

(C) summarize fluency disorders, including secondary characteristics;

(D) analyze evidence-based treatment approaches for stuttering;

(E) identify voice disorders in terms of vocal quality, pitch, volume, resonance, and duration;

(F) develop a plan for an evidence-based treatment for voice disorders and the required interface with a physician;

(G) explain language disorders in terms of the child's use of syntax, morphology, semantics, pragmatics, phonology, and metalinguistics; and

(H) compare current evidence-based treatment approaches for language disorders in preschool and elementary-age children.

(4) The student demonstrates effective verbal and nonverbal communication skills. The student is expected to:

(A) demonstrate communication skills appropriate to the situation when interacting with elementary age students, classroom teachers, speech-language pathologists, principals, and parents with communication disorders;

(B) demonstrate knowledge of verbal and nonverbal communication techniques that should be used when communicating with children that have sensory loss, language barriers, cognitive impairment, and other learning disabilities; and

(C) employ electronic communication and technology devices when interacting with children with communication disorders with appropriate supervision in a school setting.

(5) The student demonstrates sensitivity and understanding of cultural and linguistic influences on an individual's communication patterns and describes how cultural and linguistic influences must be considered when working with children with communication disorders and their families. The student is expected to:

(A) analyze how speech and language patterns vary as a function of language, age, socioeconomic status, and geography;

(B) prepare a simulated interview with the parent or family member of a child referred for a hearing or communication evaluation;

(C) identify patterns of communication that are common for individuals from different cultural and linguistic backgrounds such use of eye contact, personal space, and gestures;

(D) apply design strategies for culturally sensitive family-centered practices for children with communication disorders; and

(E) explain the terms language disorder, language delay, language difference, heritage language, and dialect for describing the communication patterns of a young child.

(6) The student identifies screening, evaluation, and diagnosis procedures that are used to identify hearing loss/deafness, speech sound production disorders, stuttering, voice impairment, and language disorders in children. The student is expected to:

(A) explain principles related to different audiometric test procedures;

(B) participate in a basic audiometric test (screening procedure) and interpret a variety of test results regarding whether the individual passed or failed the screening;

(C) interpret principles related to screening speech sound production, fluency, voice, and language skills in young children;

(D) evaluate developmental screening activities that include screening speech and language development; and

(E) synthesize the components of a comprehensive diagnostic report of findings inclusive of speech sound production, fluency (stuttering), voice production, and receptive, expressive, and social language skills to explain the test results.

(7) The student identifies research-based and evidence-based practices in speech-language pathology and audiological service delivery. The student is expected to:

(A) define evidence-based practice (EBP) and differentiate EBP from scientifically-based research in the fields of speech-language pathology and audiology;

(B) define the set of Evidence Levels used by the American Speech-Language-Hearing Association as a protocol to evaluate research evidence;

(C) correlate research studies to the Evidence Levels used by the American Speech-Language-Hearing Association;

(D) analyze the role of expert opinion and clinical experience in evidence-based practice; and

(E) design and present an action research project in the field of communication disorders.

(8) The student demonstrates knowledge and understanding of a variety of treatment approaches used with children with communication disorders. The student is expected to:

(A) compare two treatment approaches for speech sound disorders;

(B) compare two treatment approaches for fluency disorders;

(C) describe and practice treatment approaches for voice disorders in the areas of vocal quality, pitch, loudness, resonance, and duration;

(D) compare two treatment approaches for language disorders in preschool children;

(E) compare two treatment approaches for language disorders in elementary school-age children; and

(F) identify treatment approaches for language disorders with children with disabilities such as autism, intellectual disability, cleft palate, or cerebral palsy.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Texas Education Agency

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## SUBCHAPTER K. HOSPITALITY AND TOURISM

### 19 TAC §§127.569, 127.571, 127.604

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires

the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; and TEC, §28.025(b-17), which requires the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

§127.569. *Foundations of Restaurant Management (One Credit)*, Adopted 2025.

#### (a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Hospitality and Tourism. Students shall be awarded one credit for successful completion of this course.

#### (c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.

(3) Foundations of Restaurant Management provides students with a foundation to understand basic culinary skills and food service management, along with current food service industry topics and standards. Building on prior instruction, this course provides introductory insight into critical thinking, financial analysis, industry technology, social media, customer or client awareness, and leadership in the food service industry. Students will gain an understanding of restaurant operations and the importance of communicating effectively to diverse audiences for different purposes and situations in food service operations and management. Students will learn how the front of the house and the back of the house of restaurant management operate and collaborate and will obtain value-added certifications in the industry to help launch themselves into food service careers.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

#### (d) Knowledge and skills.

(1) The student demonstrates professional standards as required by the food service industry. The student is expected to:

(A) explain the importance of and demonstrate effective oral and written communication;

(B) describe professional grooming, hygiene, and appropriate uniform standards for various food service positions and scenarios;

(C) describe how punctuality and time-management skills are critical to the success of employees and businesses in the food service industry;

(D) describe what demonstrating self-respect and respect for others looks like;

(E) analyze and demonstrate effective teamwork strategies and leadership styles;

(F) describe initiative, adaptability, and problem-solving techniques and discuss how each may be used in the food service industry; and

(G) identify opportunities to participate in community leadership and teamwork activities that enhance professional skills.

(2) The student develops academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the food service industry. The student is expected to:

(A) use information management methods and tools to organize oral and written information;

(B) create a variety of written documents such as job descriptions, menus, presentations, and advertisements;

(C) calculate numerical concepts such as weights, measurements, pricing, and percentages;

(D) identify how scientific principles used in the food service industry affect customer service and profitability; and

(E) explain how to operate a profitable restaurant using mathematics and science knowledge and skills.

(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:

(A) develop and deliver business presentations;

(B) identify and create various marketing strategies used by the food service industry to increase customer or client traffic and profitability;

(C) plan and facilitate new staff member training;

(D) explain how interpersonal communications such as verbal and nonverbal cues enhance communication with coworkers, employees, managers, and customers or clients; and

(E) explain how active listening skills can affect employee morale and customer service.

(4) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:

(A) develop ideas to increase customer service, employee morale, and profitability; and

(B) describe how employing critical-thinking and interpersonal skills can help resolve conflicts with individuals such as coworkers, customers or clients, and employers.

(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:

(A) identify information technology tools and applications used to perform workplace responsibilities and explain how the tools and applications may be used to increase productivity;

(B) describe how business financial statements may be evaluated to increase profitability;

(C) analyze customer service scenarios and make recommendations for improvements;

(D) explain how point-of-sale systems are used to evaluate business outcomes and provide customer service; and

(E) design Internet resources for business profitability.

(6) The student understands the various roles and responsibilities within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:

(A) compare the roles and responsibilities of food service operations staff, including back-of-the-house, front-of-the-house, and support roles, and explain how each impact profitability of business operations;

(B) explain how developing strategic work schedules impacts effective customer service and profitability;

(C) investigate quality-control standards and practices and analyze how those standards and practices affect restaurant profitability;

(D) analyze various styles of restaurant services such as table, buffet, fast food, fast casual, and quick service for cost and level of profitability;

(E) describe how various place settings impact the customer service experience and profitability of the business; and

(F) explain how proper service techniques in food service operations contribute to the customer or client experience.

(7) The student understands the importance of health, safety, and environmental management systems in organizations and their impact on organizational performance, profitability, and regulatory compliance. The student is expected to:

(A) explain and discuss the responsibilities of workers and employers to promote safety and health in the workplace and the rights of workers to a secure workplace;

(B) explain and discuss the importance of Occupational Safety and Health Administration (OSHA) standards and OSHA requirements for organizations, how OSHA inspections are conducted, and the role of national and state regulatory entities;

(C) explain the role industrial hygiene plays in occupational safety and explain various types of industrial hygiene hazards, including physical, chemical, biological, and ergonomic;

(D) research and discuss sources of food-borne illness and determine ways to prevent them;

(E) identify and explain the appropriate use of types of personal protective equipment used in industry;

(F) discuss the importance of safe walking and working surfaces in the workplace and best practices for preventing or reducing slips, trips, and falls in the workplace;

(G) describe types of electrical hazards in the workplace and the risks associated with these hazards and describe control methods to prevent electrical hazards in the workplace;

(H) analyze the hazards of handling, storing, using, and transporting hazardous materials and identify and discuss ways to reduce exposure to hazardous materials in the workplace;

(I) identify workplace health and safety resources, including emergency plans and Safety Data Sheets, and discuss how these resources are used to make decisions in the workplace;

(J) describe the elements of a safety and health program, including management leadership, worker participation, and education and training;

(K) explain the purpose and importance of written emergency action plans and fire protection plans and describe key components of each such as evacuation plans and emergency exit routes, list of fire hazards, and identification of emergency personnel;

(L) explain the components of a hazard communication program; and

(M) explain and give examples of safety and health training requirements specified by standard setting organizations.

(8) The student explores professional ethics and legal responsibilities within the food service industry. The student is expected to:

(A) research and describe laws and guidelines affecting operations in the restaurant industry; and

(B) explain the reasons for liability insurance in the restaurant industry.

(9) The student understands the importance of developing skills in time management, decision making, and prioritization. The student is expected to:

(A) identify and explain delegation of tasks related to the effective operation of a food service establishment;

(B) describe the relationships between scheduling, payroll costs, and sales forecasting; and

(C) analyze various steps in determining the priority of daily tasks to be completed in a food service establishment.

(10) The student investigates the skills, training, and educational requirements needed to successfully gain and maintain employment in the food service industry and explores local and regional opportunities in the industry. The student is expected to:

(A) describe effective strategies for seeking employment in the food service industry;

(B) identify the required training and educational requirements that lead to a career in the food service industry;

(C) select educational and work history highlights to include in a career portfolio;

(D) create and update a personal career portfolio;

(E) describe and demonstrate effective interviewing techniques for gaining employment in the food service industry;

(F) create a personal training plan for obtaining employment in a specific occupation such as Texas Alcoholic Beverage

Commission training and Food Safety and Sanitation training in the food service industry;

(G) research and analyze the local and regional labor market to determine opportunities in the food service industry;

(H) investigate professional development opportunities to keep current on relevant trends and information within the food service industry; and

(I) identify and discuss entrepreneurship opportunities within the food service industry.

(11) The student explores factors that have shaped the food service industry. The student is expected to:

(A) research and describe the history and growth of the food service industry;

(B) explain how culture and globalization influence the food service industry; and

(C) analyze current trends affecting the food service industry.

(12) The student understands factors that affect the profitability of a food service business. The student is expected to:

(A) explain the importance of effectively managing inventory to maintain profitability of the food service business;

(B) describe and demonstrate effective stewarding processes and procedures such as establishing thorough cleaning schedules and proper dishwashing techniques;

(C) describe how proper food storage techniques affect the profitability of an establishment;

(D) explain how pricing and controlling costs such as labor and supplies affect the profitability of a food service business; and

(E) analyze how customer service and customer or client loyalty affect the profitability of a food service business and compare strategies for building and maintaining customer loyalty.

*§127.571. Event and Meeting Planning (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit in a course from the Hospitality and Tourism Career Cluster. Recommended prerequisite: Principles of Hospitality and Tourism, Hotel Management, or Travel and Tourism Management. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other

food/beverage services, lodging, attractions, recreation events, and travel-related services.

(3) Event and Meeting Planning introduces students to the concepts and topics necessary to understand the meetings, events, expositions, and conventions (MEEC) industry. The course will review the roles of the organizations and people involved in the businesses that comprise the MEEC industry.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student recognizes the importance of and uses oral and written communication skills in creating, expressing, and interpreting information and ideas. The student is expected to:

(A) explain the importance of using verbal and non-verbal communication skills effectively with customers or clients and colleagues;

(B) summarize information formally and informally;

(C) synthesize information from various sources and determine how to prioritize and convey relevant information to customers or clients and colleagues;

(D) explain how to use active listening skills to obtain and clarify information;

(E) develop and deliver different types of presentations such as informative, instructional, persuasive, and decision making;

(F) identify interpersonal skills used to maintain internal and external customer or client satisfaction and describe how effectively using those interpersonal skills impacts customer or client relationships; and

(G) identify and use technical vocabulary related to the meeting and event planning industry.

(2) The student applies academics with career-readiness skills. The student is expected to:

(A) explain how applying mathematical skills to business transactions such as sales forecasting, service pricing, and planning for profitability are essential to operating a successful business;

(B) calculate and interpret key ratios, financial statements, and budgets related to the hospitality event and meeting planning industry;

(C) identify opportunities in the hospitality industry to use advanced reading, writing, and mathematics skills;

(D) analyze and summarize data from tables, charts, and graphs to estimate and find solutions to problems and identify opportunities for increased profitability; and

(E) identify and use industry standards for budgeting and forecasting to maximize profit and growth.

(3) The student explores career opportunities available within the meeting and event planning segment of the hospitality industry. The student is expected to:

(A) compile a list of professional organizations that support the professionals in the convention, meeting, and event planning industry;

(B) develop a personal training plan to keep current on relevant trends and information within the meeting and event planning industry; and

(C) identify occupational opportunities for meeting and event planning for hospitality businesses and corporate businesses.

(4) The student explores the history of and current trends and career opportunities in the meeting and event planning industry. The student is expected to:

(A) describe how the meeting and event planning industry has evolved;

(B) analyze and describe current trends in the meeting and event planning industry;

(C) describe the varied occupations related to meeting and event planning such as meeting planning and management, conference planning and management, trade show planning and management, social event planning and management, association and non-profit meeting planning and management, corporation meeting planning and management, convention and visitor bureau planning and management, and destination management planning and organization;

(D) describe how a professional mentor can be beneficial to a career and identify potential mentors in the meeting and event planning industry; and

(E) create a career plan to achieve the desired career position in the meeting and event planning industry.

(5) The student explores how varying needs of customers or clients impact the event planning industry. The student is expected to:

(A) explain the importance of meeting the varying needs of customers or clients for the successful operation of a business;

(B) explain how a business plan and business activities may be modified to meet the varying needs of customers or clients; and

(C) describe how understanding diversity such as differences in social etiquette, dress, and behaviors may positively impact event and meeting planning.

(6) The student uses information technology tools in event and meeting planning to access, manage, integrate, and create information. The student is expected to:

(A) research and compare event planning software and technology tools such as tools that manage attendee engagement or provide marketing services that help perform workplace tasks and meet business objectives;

(B) create complex multimedia publications and presentations for clients and colleagues;

(C) explain how point-of-sale systems are used in the meeting and event planning industry;

(D) explain how Internet resources can promote industry growth;

(E) investigate and evaluate current and emerging technologies used to improve guest services; and

(F) use electronic tools to produce appropriate communication for planning and selling meetings and events.

(7) The student understands the professional, ethical, and legal responsibilities in event and meeting planning services. The student is expected to:

- (A) explain ethical conduct such as maintaining client confidentiality and privacy of sensitive content when interacting with others;
- (B) identify different components of a meeting or event contract;
- (C) investigate and describe applicable rules, laws, and regulations related to event and meeting planning;
- (D) discuss the reasons for providing event security;
- (E) compare options for event insurance; and
- (F) explain the reasons for event insurance.

(8) The student understands the importance of health, safety, and environmental management systems and their impact on organizational performance and regulatory compliance. The student is expected to:

- (A) explain and discuss the responsibilities of workers and employers to promote safety and health in the workplace and the rights of workers to a secure workplace;
- (B) explain and discuss the importance of Occupational Safety and Health Administration (OSHA) standards and OSHA requirements for organizations, how OSHA inspections are conducted, and the role of national and state regulatory entities;
- (C) explain the role industrial hygiene plays in occupational safety and explain various types of industrial hygiene hazards, including physical, chemical, biological, and ergonomic;
- (D) research and discuss sources of food-borne illness and determine ways to prevent them;
- (E) identify and explain the appropriate use of types of personal protective equipment used in industry;
- (F) discuss the importance of safe walking and working surfaces in the workplace and best practices for preventing or reducing slips, trips, and falls in the workplace;
- (G) describe types of electrical hazards in the workplace and the risks associated with these hazards and describe control methods to prevent electrical hazards in the workplace;
- (H) analyze the hazards of handling, storing, using, and transporting hazardous materials and identify and discuss ways to reduce exposure to hazardous materials in the workplace;
- (I) identify workplace health and safety resources, including emergency plans and Safety Data Sheets, and discuss how these resources are used to make decisions in the workplace;
- (J) describe the elements of a safety and health program, including management leadership, worker participation, and education and training;
- (K) explain the purpose and importance of written emergency action plans and fire protection plans and describe key components of each such as evacuation plans and emergency exit routes, list of fire hazards, and identification of emergency personnel;
- (L) explain the components of a hazard communication program; and
- (M) explain and give examples of safety and health training requirements specified by standard setting organizations.

(9) The student explores marketing strategies and how effective marketing strategies are used in the meeting and event planning industry. The student is expected to:

- (A) develop effective marketing strategies for meetings and events;
- (B) create promotional packages for meetings and events;
- (C) design an effective, comprehensive menu;
- (D) analyze the state of the economy to plan effective meeting and event services; and
- (E) develop a meeting and events business plan.

(10) The student understands and demonstrates appropriate professional customer service skills required by the meeting and event planning industry. The student is expected to:

- (A) create a detailed plan or process to provide maximum customer service;
- (B) describe and demonstrate how critical-thinking and interpersonal skills are effectively used to resolve conflicts with individuals such as coworkers, employers, guests, and clients; and
- (C) analyze customer or client feedback to formulate improvements in services and products.

(11) The student explores different business segments and stakeholders within the event and meeting planning industry. The student is expected to:

- (A) compare roles and responsibilities of various departments in the larger lodging environment, including food and beverage services;
- (B) differentiate between meeting and event planning operations for different clients such as business, leisure, professional organizations, and students; and
- (C) identify the various stakeholders in the MEEC industry.

(12) The student understands the roles and responsibilities within teams, work units, departments, organizations, and the larger environment of the meeting and event planning industry. The student is expected to:

- (A) differentiate between the roles and responsibilities of meeting and event planning staff and lodging property staff;
- (B) describe the responsibilities of an event manager or planner;
- (C) identify and explain how operating procedures can contribute to profitable operations; and
- (D) identify and explain how inventory management systems used in the meeting and event planning industry can contribute to profitable operations.

(13) The student knows how to create a functional and aesthetic meeting and event plan to meet the customer or client requirements. The student is expected to:

- (A) describe how to conduct a pre-meeting or pre-event meeting with potential clients to identify the meeting or event requirements;
- (B) discuss the importance of a meeting venue floorplan specification chart and appropriate meeting room set-up;

(C) compare various meeting room set-up options and describe the benefits of each option;

(D) describe how meeting room set-up options vary based on the venue;

(E) develop a meeting room set-up for a planned event;

(F) calculate the square footage required for an event based on the number of anticipated attendees for the event;

(G) identify and design effective traffic patterns for a specific event;

(H) explain and demonstrate proper table rotations; and

(I) develop a staffing guide to schedule various staff for a meeting or event.

(14) The student understands the importance of collaborating with various companies to provide an all-inclusive successful meeting or event. The student is expected to:

(A) identify the various entities involved in the meeting and event planning industry such as convention and visitors' bureaus, group travel companies, entertainers, recreations, amusements, attractions, florists, caterers, and venues and differentiate between the roles each entity plays in planning the meeting or event;

(B) differentiate between event sponsors, organizers, and producers and the events that are coordinated by each;

(C) explain and demonstrate how to effectively plan and negotiate with various entities to deliver a successful meeting or event;

(D) compare products and services from related industries; and

(E) explain how the meeting and event planning process differs based on the venue such as hotels and resorts, convention and visitors' centers, event centers, and destination venues and describe the pros and cons of convening a meeting or event at various venues.

*§127.604. Practicum in Event and Meeting Planning (Two Credits), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: a minimum of two credits with at least one credit in a Level 2 or higher course from the Hospitality and Tourism Career Cluster. Recommended prerequisite: Event and Meeting Planning. Students shall be awarded two credits for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.

(3) The Practicum in Event and Meeting Planning course will reinforce the concepts and topics necessary for the comprehensive understanding of the meetings, events, expositions, and conventions (MEEC) industry. The central focus of this course is to integrate academic education with local MEEC businesses to prepare students for success in the work force and/or postsecondary education. Students will benefit from a combination of classroom instruction and a work-based learning experience. Students will learn employability skills, communication skills, customer service skills, and other activities related to job acquisition. The course is recommended for students who have completed the required prerequisites.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student applies professional advancement skills and strategies in the meeting and event planning industry. The student is expected to:

(A) develop strategies to enhance career advancement and promote lifelong industry learning;

(B) describe historical events that have affected the event and meeting planning industry;

(C) formulate plans to address current events that have an effect on the event and meeting planning industry;

(D) document in manual and electronic format acquired technical knowledge and skills needed for success in the meeting planning industry;

(E) produce and present a professional portfolio, including a current resume, documentation of skill attainment or technical competencies, recognitions, awards, scholarships, community service activities, student organization participation, evaluations, letters of recommendation, and cover letters;

(F) evaluate employment options by comparing salaries and benefits offered by different companies and occupations within the industry; and

(G) develop a personal budget based on career choice using effective money management and financial planning techniques.

(2) The student demonstrates the ethics and etiquette necessary for the meeting and event planning workplace. The student is expected to:

(A) practice appropriate business and personal etiquette in the workplace;

(B) display appropriate electronic communication techniques and etiquette;

(C) exhibit the behaviors that align with the hospitality code of ethics and ethical standards; and

(D) determine the most ethical behavior or course of action in response to various situations experienced in the meeting and event planning industry.

(3) The student develops and demonstrates the interpersonal and customer service skills needed for success in the meeting and event planning environment. The student is expected to:

(A) exhibit essential workplace characteristics such as organization, perseverance, motivation, dependability, punctuality, initiative, self-control, and the ability to accept and act on criticism;

(B) demonstrate effective team-building skills such as collaboration, planning, conflict resolution, rapport-building, decision-making, problem-solving, and persuasion and influencing techniques;

(C) identify and respond to customer or client needs, including resolving customer dissatisfaction;

(D) exercise leadership by anticipating and proactively diffusing potential event issues; and

(E) negotiate to resolve conflicts in the workplace and with customers by using strategies such as active listening, "I" messages, negotiation, and offering win-win solutions.

(4) The student demonstrates the industry-based knowledge and skills required for a successful career in the event and meeting planning industry. The student is expected to:

(A) employ job-specific technical vocabulary with accuracy and fluency;

(B) explain event planning procedures designed to ensure client needs are met such as Banquet Event Orders, rate assignment, event organization, client relations, and determination of payment methods;

(C) assess meeting or event company structures and traits that lead to profitability and business success;

(D) determine the correct procedures for the execution of client events and contracts;

(E) identify and organize tasks for daily operation;

(F) describe societal events that have shaped the event and meeting planning industry both in the past and present; and

(G) interpret the role of the convention and visitors' bureau in the event and meeting planning industry.

(5) The student develops and practices awareness of varying needs of customers or clients understands the impact of diversity on the industry. The student is expected to:

(A) assesses how varying needs of customers or clients impacts the event planning industry both from a planning and profitability aspect;

(B) demonstrate respect for individual differences;

(C) explain the importance of meeting the varying needs of customers or clients for the successful operation of a business;

(D) develop business plans and activities to meet the varying needs of customers or clients; and

(E) describe differences in social etiquette, dress, and behaviors and explain how differences affect the event planning process.

(6) The student uses information technology tools in event and meeting planning to access, manage, integrate, and create information. The student is expected to:

(A) evaluate current and emerging technologies that improve client services;

(B) evaluate and incorporate event planning software and technology tools that help to perform workplace tasks and meet business objectives;

(C) create and present multi-level (complex) multimedia presentations to clients;

(D) use and problem-solve issues with point-of-sale systems;

(E) design a plan for using Internet resources to maximize company profitability; and

(F) use appropriate electronic communication tools for planning and selling meetings and events.

(7) The student differentiates between and adapts to various roles, types of events, and functions. The student is expected to:

(A) differentiate between the types of event sponsors, organizers, and producers and their events such as trade shows, conferences, social events, and corporate meetings;

(B) identify various suppliers for different event planning needs and explain how they service different events;

(C) describe the importance of sales coordinators to events and meetings regardless of organization or type of event;

(D) evaluate and modify different types of catering options and menus based on the needs of the event or organization;

(E) evaluate and modify different types of meeting room set-ups (banquet, classroom, theater, and reception) based on the needs of the event or organization; and

(F) determine and organize staff and resources according to the specific needs of the organization and event.

(8) The student collaborates within departments, organizations, and the larger environment of the meeting and event planning industry. The student is expected to:

(A) analyze the roles and responsibilities of each level of the management structure of a venue;

(B) identify the advantages and disadvantages of different event destinations and facilities and their effects on profitability and customer satisfaction;

(C) analyze the roles and responsibilities of an in-house event manager or planner as compared to independent professionals; and

(D) define specific roles and responsibilities when interfacing with destination venues.

(9) The student understands and can articulate the factors that contribute to a successful and profitable event. The student is expected to:

(A) analyze the expenses associated with the planning and production of a meeting or event;

(B) analyze and evaluate how marketing techniques impact operation and profitability related to an event;

(C) calculate costs of supplies and evaluate how costs affect profitability;

(D) evaluate the impact of payroll expenses on profitability;

(E) analyze and modify operating procedures to result in more profitable or cost-effective operations;

(F) research and create a marketing plan for various markets such as weddings, government and military groups, professional and educational organizations, family or social gatherings, and geography;

(G) identify profit margins associated with various markets; and

(H) evaluate the importance of conducting pre-and post-event evaluations for continuous improvement.

(10) The student demonstrates knowledge of potential liability situations that can affect business reputation and profitability. The student is expected to:

(A) compare and contrast different levels of insurance and liability limits for events;

(B) analyze customer-provided insurance options for events;

(C) identify and explain legal, health, and safety obligations related to event planning;

(D) assess the implications and responsibilities associated with providing or allowing alcohol at an event; and

(E) research law enforcement requirements for events and meetings.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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## SUBCHAPTER M. LAW AND PUBLIC SERVICE

### 19 TAC §§127.689 - 127.691, 127.695 - 127.699

STATUTORY AUTHORITY. The new sections are adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; and TEC, §28.025(b-17), which requires

the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

CROSS REFERENCE TO STATUTE. The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

§127.689. *Advanced Cloud Computing (One Credit), Adopted 2025.*

#### (a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: At least one credit from a course in computer science, programming, software development, or networking systems. Students shall be awarded one credit for successful completion of this course.

#### (c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) The Advanced Cloud Computing course is an exploration of cloud computing. In this course, students explore cloud computing services, applications, and use cases. Students study cloud computing best practices and learn how cloud computing helps users develop a global infrastructure to support use case at scale while also developing and using innovative technologies.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

#### (d) Knowledge and skills.

(1) The student understands the impact of cloud computing technology and compares the major services offered by cloud computing providers. The student is expected to:

(A) describe the benefits and risks of cloud computing and the reasons for switching from on-premises computing to cloud computing;

(B) identify and describe the major types of cloud computing;

(C) generate sample cloud usage plans for a business case study, including a description of how each of the services can be used to improve the business;

(D) explain the purpose of a region, availability zone, and edge location; and

(E) compare the major services offered by cloud computing providers.

(2) The student demonstrates how to store and share content in the cloud. The student is expected to:

(A) identify features and functions of commonly used cloud services;

(B) locate and use common services found in cloud computing consoles;

(C) analyze how cloud services are used in real-world industries;

(D) explain the functions of a domain name system (DNS);

(E) create an object storage bucket;

(F) explain benefits and uses of a content delivery network;

(G) configure web content distribution via edge locations and attach it to a website;

(H) identify the benefits, features, and use cases of different types of block storage;

(I) analyze a use case and recommend the best type of virtual storage for the particular situation;

(J) create a block storage volume or physical record;

(K) attach a block storage volume to a virtual computing instance; and

(L) create a virtual computing instance that hosts a simple website.

(3) The student applies cloud security best practices in relation to identity and access management (IAM). The student is expected to:

(A) identify best practices for IAM;

(B) analyze the cultural and societal impacts of cloud security;

(C) differentiate between a role, user, and policy in cloud security;

(D) identify and use a process to resolve vulnerabilities in a web server;

(E) describe cloud security best practices and explain steps to fix security lapses;

(F) identify the best cloud security service for a given scenario;

(G) demonstrate the use of an IAM system to set up a text alert event; and

(H) compare monitoring and logging services.

(4) The student describes when to use various databases, the benefits of caching data, and how to build a virtual private cloud (VPC). The student is expected to:

(A) compare online transactional processing and online analytical processing;

(B) describe the benefits of caching data;

(C) explain and demonstrate how a load balancer is attached to a webpage;

(D) describe features and benefits of load balancing;

(E) evaluate the performance of a load balancer;

(F) create an application using a platform as a service (PaaS); and

(G) demonstrate the use of a template infrastructure as code to build a VPC.

(5) The student understands the landscape of emerging technologies in the cloud. The student is expected to:

(A) define machine learning and discuss its impacts on society, business, and technology;

(B) identify potential use cases for emerging technology in the cloud;

(C) assess value propositions of using cloud technology;

(D) identify cloud services that can analyze and protect data and manage networks;

(E) define blockchain technology and explain its benefits;

(F) explain the infrastructure of cloud development kits or services; and

(G) demonstrate the use of a software development framework to model and provision a cloud application.

(6) The student resolves common security alerts, diagrams instance states and transitions, and explains how to choose the most cost-efficient instance type. The student is expected to:

(A) describe the shared responsibility security model;

(B) identify security responsibility for cloud resources;

(C) analyze how the shared security model accounts for common threats to the cloud computing model;

(D) identify the steps required to resolve an automated security alert;

(E) describe the six instance states, including pending, running, stopping, stopped, shutting down, and terminated;

(F) identify and diagram the transitions between instance states from launch to termination;

(G) explain instance usage billing for each instance state; and

(H) determine the most cost-efficient instance state for a given situation.

(7) The student differentiates between dynamic and static websites. The student is expected to:

(A) describe and demonstrate the process for setting up a static website;

(B) compare static and dynamic websites;

(C) create a content delivery network distribution to increase the speed of a website;

- (D) demonstrate the process to launch a dynamic web server;
- (E) create a serverless compute function using a serverless compute console;
- (F) describe the main functions of auto scaling;
- (G) create a launch template and an auto scaling group; and

(H) develop a plan for monitoring an auto scaling instance or group.

(8) The student demonstrates the benefits and risks of using big data. The student is expected to:

- (A) define big data and identify use cases for it within various industries;
- (B) identify and evaluate the benefits and risks of big data;
- (C) explain how blockchain ensures the validity and immutability of transactions, particularly in the cloud; and
- (D) evaluate the benefits and risks of blockchain business applications.

§127.690. *Foundations of User Experience (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 9-12. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) In Foundations of User Experience (UX), students analyze and assess current trends in a career field that creates meaningful, approachable, and compelling experiences for users of an array of products, services, and/or initiatives of companies, governments, and organizations. Students gain knowledge of introductory observation and research skills, basic design thinking and applied empathy methodologies, collaborative problem-solving and ideation, and interaction design and solution development. The knowledge and skills acquired from this course enable students to identify real-world problems through research and data-driven investigation and to design solutions while participating in collaborative problem solving. Students are introduced to agile practices and methodologies to develop skills to take solutions from conceptual sketch to digital designs using professional

software tools. Students explore how to improve the quality of user interactions and perceptions of products, experiences, and any related services.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student applies professional communications strategies. The student is expected to:

- (A) revise presentations for audience, purpose, situation, and intent;
- (B) interpret and clearly communicate information, data, and observations;
- (C) apply active listening skills to obtain and clarify information;
- (D) identify multiple viewpoints of potential diverse users; and
- (E) define and exhibit public relations skills that are used by UX designers.

(2) The student describes the field of UX and common elements in user-centered design. The student is expected to:

- (A) analyze the current trends and challenges of the UX field;
- (B) analyze and describe the diversity of roles and career opportunities across the UX field;
- (C) define terminology associated with UX, including user, user experience, human-centered design, design thinking, persona, user journey, empathy map, mind maps, roadmaps, wireframes, prototypes, and portfolios;
- (D) identify and explain the differences between relevant, friendly, and useful experience design;
- (E) identify and explain the connection between psychology and behavior with regard to usability;
- (F) explain the components of the design thinking methodology for ideation, iteration, co-creation, development, and execution; and
- (G) explain how UX design affects everyday lives.

(3) The student discusses and applies the legal and ethical practices that UX designers follow when working with technology, designs, and clients. The student is expected to:

- (A) identify and explain ethical use of technology;
- (B) explain intellectual property laws, including copyright, trademarks, and patents, and consequences of violating each type of law;
- (C) identify violations of intellectual property laws;
- (D) explain the consequences of plagiarism; and
- (E) demonstrate ethical use of online resources, including using proper citations and avoiding plagiarism.

(4) The student identifies and demonstrates introductory observation and research methods. The student is expected to:

(A) describe the difference between qualitative and quantitative data;

(B) conduct user interviews to gather insights into what users think about a site, an application, a product, or a process;

(C) organize ideas and user data using software tools;

(D) analyze and draw conclusions from qualitative user data collection;

(E) observe and document how users perform tasks through task analysis observations;

(F) define affinity and explain the benefits of affinity and customer journey maps;

(G) use data summaries from user interviews to create personas; and

(H) create a report or presentation, including user interview and observation data summaries, data analysis, and additional findings, for a target audience.

(5) The student applies an understanding of psychological principles used in user-centered design. The student is expected to:

(A) identify and define design principles;

(B) describe how visceral reactions inform the creation of a positive user experience;

(C) select colors to influence human behavior, the human mind, and reactions toward an intended outcome;

(D) explain recognition and scanning patterns and their importance in user-centered design;

(E) define Hick's Law and Weber's Law and explain their impact on UX design decisions;

(F) describe sensory adaptation phenomenon and perceptual set; and

(G) explain the stages of human information processing, including sensing, perceiving, decision-making, and acting.

(6) The student creates effective, accessible, usable, and meaningful solutions for the end user by using UX design principles. The student is expected to:

(A) identify end-user problems and needs in real-world environments;

(B) identify principles of accessibility such as perceivable, operable, understandable, and robust (POUR);

(C) identify and discuss the differences and connections between UX Design, Visual Design, and User Interaction in regard to usability;

(D) communicate potential solutions and ideas with a storytelling approach;

(E) sketch and refine designs within wire-framing and prototypes; and

(F) implement iterations for a design solution using structured testing protocols.

(7) The student collaborates with others to apply UX project management methods. The student is expected to:

(A) identify the relationship between UX research and design-thinking methods; and

(B) explain three different stages and roles of UX project management methods such as agile methods.

(8) The student applies UX design practices and uses technology to create digital assets. The student is expected to:

(A) use design elements such as typeface, color, shape, texture, space, and form to create a visual narrative;

(B) implement design principles such as unity, harmony, balance, scale, novelty, hierarchy, alignment, and contrast to create visual narratives;

(C) identify and explain common elements of Hyper Text Markup Language (HTML) such as tags, style sheets, and hyperlinks;

(D) apply UX design techniques in order to:

(i) create effective user interfaces for browser-based, native, and hybrid mobile applications;

(ii) demonstrate proper use of vector and raster-based design software;

(iii) explain the difference between back-end and front-end development in UX; and

(iv) create a web page containing links, graphics, and text using appropriate design principles;

(E) demonstrate basic sketching skills;

(F) create wireframes using design software;

(G) explain how design fidelity, from sketch to wireframe to prototype to visuals, aligns with and supports agile methodology; and

(H) produce digital assets.

*§127.691. Advanced User Experience Design (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Foundations of User Experience. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support, and management of hardware, software, digital interactions, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) The Advanced User Experience (UX) Design course allows students to apply skills in science and art to integrate technology as a useful, meaningful, memorable, and accessible source for all users. Students will use knowledge from the Foundations of User Experience course to expand the research, design process, testing, and communication skills essential for success in this user-focused career field.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student understands and demonstrates legal and ethical procedures for UX designers as they apply to the use of information technology. The student is expected to:

(A) identify intellectual property violations within given scenarios; and

(B) formulate and communicate visually, orally, or in writing the ramifications and consequences of plagiarism and copyright infringement within a business context.

(2) The student connects and applies UX design conceptual foundations with real-world scenarios. The student is expected to use proper terms and professional language for UX design context, both orally and in written form.

(3) The student uses different options of project management to produce a successful UX design. The student is expected to:

(A) identify different stages of the UX design process, including research, identification of problem, ideation, prototyping, and testing, and apply these stages to refine or create products;

(B) test partial products during the UX design process and analyze results to inform the refinement phase;

(C) explain the conceptual design, content strategy, and ways to get feedback from various users and stakeholders in the project; and

(D) demonstrate effective time-management and planning to complete project tasks.

(4) The student collects and interprets data through the use of UX tools and protocols. The student is expected to:

(A) create templates for questionnaires, data collection, and summary reports;

(B) analyze data and create a summary of project conclusions that include insights into affordances and constraints of the project design;

(C) distinguish differences in qualitative research methods such as user interviews, ethnography, field studies, focus groups, and usability testing; and

(D) identify and use quantitative methods such as A/B testing, card sorting, heat maps, analytics, and user surveys.

(5) The student creates and analyzes prototypes for UX design products. The student is expected to:

(A) identify a UX problem and list potential solutions;

(B) evaluate potential solutions and create an action plan to address a problem based on desired features and requirements for a UX design product;

(C) create a presentable content strategy and develop conceptual designs and symbolic messages for a UX design prototype;

(D) generate possible solutions with ideation methods such as unstructured discussion, storyboards, brainstorming, role playing, game storming, mind mapping, teamwork games, and sketching;

(E) refine and select ideas for prototyping with a people-centered rationale for the decision;

(F) create low-fidelity prototypes, including sketches, paper models, and click-through prototypes; and

(G) create mockups and high-fidelity prototypes, including digital and physical versions.

(6) The student structures solutions while applying UX design principles. The student is expected to:

(A) explain how the connected layouts, blocks of content, visual designs, and navigation requirements enhance user experience;

(B) explain how the distinguishing of channels and formats during website development impacts usability across different devices;

(C) develop and implement design activities for co-creation, peer-review, and collaborative feedback;

(D) test and evaluate navigation experiences and compare results with current competitors; and

(E) incorporate best practices for references, including adding the designer's voice and signature.

(7) The student describes best practices and plans for a usability test. The student is expected to:

(A) create a usability test plan that includes cognitive, perceptual, emotional, and cultural information about users, data collection requirements, and user testing methods;

(B) execute testing methodologies and collect data for analysis purposes; and

(C) present conclusions and recommendations that apply design principles, communication, and creative skills.

*§127.695. Information Technology Troubleshooting (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit in a course from the Information Technology Career Cluster. Recommended prerequisites: Principles of Information Technology and Computer Maintenance/Lab. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology (IT) Career Cluster focuses on building linkages in IT occupations for entry-level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) The Information Technology Troubleshooting course is about applying logic over technical components to identify and resolve problems. The course focuses on developing a methodical approach in IT troubleshooting and leveraging those skills in a workplace environment. In this course, students learn and use proven troubleshooting methods and apply those in a collaborative workplace setting. Students develop personal success skills, including time management and personal accountability measures, strategies for collaboration and teamwork, and effective written and verbal communication skills. The knowledge and skills acquired in the course enables students to use IT resources and data safely, ethically, and within legal guidelines. Students work within a service level model that helps them to interpret, clarify, and diagnose issues with hardware, software, and networking.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student develops and models customer-service skills. The student is expected to:

- (A) identify and model the characteristics of excellent customer service;
- (B) list and demonstrate the steps for opening and greeting a contact;
- (C) explain the benefits of using a client's name;
- (D) identify habits and situations to avoid when interacting with a client;
- (E) explain the importance of keeping clients informed of status changes;
- (F) list and demonstrate the steps for putting a client on hold or transferring a call;
- (G) identify and demonstrate techniques and strategies for handling difficult calls and situations; and
- (H) document all client communications and outcomes clearly and appropriately.

(2) The student applies procedures for various support interaction types. The student is expected to:

- (A) describe the primary responsibilities and skills of an IT support specialist and how to deliver consistent, quality service;
- (B) explain and demonstrate safety procedures for unpacking, handling, and repacking replacement parts;

(C) describe when to use various support delivery methods and technologies such as in-person, email, phone, web, and remote access;

(D) demonstrate the use of various support delivery models, including in-person, email, phone, web, and remote access technologies, to troubleshoot an issue; and

(E) describe the purpose and value of the security management process and the IT support specialist's role in that process.

(3) The student implements proven troubleshooting methods and strategies within the context of a service level model. The student is expected to:

(A) implement and explain a troubleshooting process for diagnosing issues with hardware, software, and the network;

(B) explain the importance of clearly documenting progress throughout the troubleshooting process;

(C) describe activities common to help desk service level model and incident management processes;

(D) interpret and clarify different types of incidents, problems, and events submitted in the help desk service model or trouble ticketing system;

(E) describe an operational level agreement (OLA) and the role of the IT support specialist in an OLA;

(F) describe what is meant by escalation and the reasons an incident may be escalated;

(G) identify and apply relevant system updates for supported devices; and

(H) describe service and support center metrics, including a service level target and the IT support specialist's role in monitoring and reviewing data related to these metrics.

(4) The student describes and applies best practices for the safe, ethical, and legal use of resources and information. The student is expected to:

(A) demonstrate and describe positive digital citizenship and acceptable use policy when using digital resources;

(B) describe best practices for creating passwords such as increasing password length and password complexity, enforcing password blacklists, resetting passwords, limiting password entry attempts, and using multi-factor authentication;

(C) examine, describe, and demonstrate the use of guidelines for using media, information, and applications protected by copyright;

(D) compare and explain copyright, fair use, public domain, and Creative Commons licensing;

(E) identify and apply licensing guidelines for software, media, and other resources;

(F) explain the importance and uses of encryption;

(G) describe and demonstrate best practices for handling confidential information;

(H) analyze cyber threats and social engineering vulnerabilities and discuss ways to prevent them;

(I) describe various types of security policies and summarize the importance of physical security and logical security measures;

(J) explain the importance of reporting security compromises such as addressing prohibited content and activity; and

(K) identify and demonstrate appropriate data destruction and disposal methods relevant to a given scenario.

(5) The student applies foundational knowledge and skills for the installation, configuration, operation, and maintenance of desktops and workstations. The student is expected to:

(A) explain the procedure used to install and configure motherboards, central processing units (CPUs), and add-on cards relevant to a given scenario such as a custom personal computer configuration to meet customer specifications;

(B) describe how to implement security best practices to secure a workstation, including software-based computer protection tools such as software firewalls, antivirus software, and anti-spyware;

(C) demonstrate how to identify symptoms or error codes, including no power, no POST, no BOOT, and no video, that indicate device issues and explain how to troubleshoot symptoms or error codes;

(D) describe the process used to install, troubleshoot, and replace random-access memory (RAM) types and data storage;

(E) describe how to troubleshoot, clean, repair, or replace internal components, including heat sink units and thermal paste, exhaust vents and fans, power supply units, power adapters, batteries, wireless elements, and wireless wide area network (WWAN) components;

(F) explain the importance of conducting periodic maintenance, including both physical and electronic cleaning, disk checks, routine reboots, data dumps, and testing; and

(G) describe and demonstrate how to prevent, detect, and remove malware using appropriate tools and methods.

(6) The student applies foundational knowledge and skills about the installation, configuration, operation, and maintenance of operating systems (OS) and software. The student is expected to:

(A) describe and demonstrate the use of OS features and tools relevant to given scenarios;

(B) describe and demonstrate the use of OS utilities relevant to given scenarios;

(C) execute OS command-line tools such as ipconfig, netstat, dir, nbtstat;

(D) troubleshoot and document OS problems relevant to a given scenario;

(E) demonstrate how to use features and tools of various operating systems properly;

(F) troubleshoot and document problems in various operating systems; and

(G) explain database concepts and the purpose of a database.

(7) The student installs, configures, operates, maintains, and troubleshoots issues related to peripheral devices relevant to a given scenario. The student is expected to:

(A) explain and demonstrate how to install, configure, maintain, and troubleshoot storage devices;

(B) explain and demonstrate how to install, configure, maintain, and troubleshoot printers, copiers, and scanners, including small office home office (SOHO) multifunction devices and printers;

(C) explain and demonstrate how to install, configure, maintain, and troubleshoot video projectors and video displays; and

(D) explain and demonstrate how to install, configure, maintain, and troubleshoot multimedia devices such as sound cards, speakers, microphones, and webcams.

(8) The student monitors current issues related to the installation, configuration, operation, and maintenance of laptops, tablets, and other mobile devices, including internet of things (IoT) devices. The student is expected to:

(A) explain and demonstrate how to install and configure laptop and netbook hardware to meet customer specifications;

(B) explain and demonstrate how to install components within the display of a laptop;

(C) explain and demonstrate how to connect and configure accessories and ports of mobile devices;

(D) analyze and apply methods used to secure mobile devices;

(E) configure mobile device network connectivity and application support;

(F) demonstrate proper methods to perform mobile device synchronization such as synchronizing information to a laptop or desktop computer; and

(G) explain and demonstrate how to troubleshoot issues relevant to mobile devices, OS, and applications.

(9) The student troubleshoots issues with wired and wireless networks and cloud computing resources. The student is expected to:

(A) explain and demonstrate how to install, configure, and secure a wired network;

(B) explain and demonstrate how to install, configure, and secure a wireless network;

(C) compare wireless security protocols and authentication methods;

(D) analyze, describe, and troubleshoot wired and wireless network problems;

(E) demonstrate the use of appropriate networking tools to fix network issues safely;

(F) explain how computing devices such as laptops and cell phones connect and share data;

(G) describe the components of cloud-computing architectures and features of cloud-computing platforms; and

(H) analyze, describe, and troubleshoot cloud computing resources.

§127.696. *Engineering Applications of Computer Science Principles (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter

(relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 9-12. Prerequisite: Algebra I and at least one credit in a course from the Information Technology Career Cluster. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialists and network analysts.

(3) Engineering Applications of Computer Science Principles teaches rigorous engineering design practices, engineering habits of mind, and the foundational tools of computer science. Students apply core computer science principles to solve engineering design challenges that cannot be solved without such knowledge and skills. Students use a variety of computer software and hardware applications to complete projects.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student applies concepts of critical thinking and problem solving to engineering applications in computer science. The student is expected to:

(A) identify, analyze, and discuss elements of an engineering problem to develop creative and innovative solutions;

(B) identify, analyze, and discuss the elements and structure of a programming problem to develop creative and innovative solutions;

(C) identify and discuss pertinent information from a customer and existing program for solving a problem;

(D) compare and discuss alternatives to a solution using a variety of problem-solving and critical-thinking skills; and

(E) conduct research to gather technical information necessary for decision making.

(2) The student conducts computer science and engineering laboratory activities using safe and environmentally appropriate practices. The student is expected to:

(A) identify and demonstrate safe practices during hands-on cutting and building activities during computer science and engineering laboratory activities;

(B) identify and demonstrate safe use and storage of electrical components; and

(C) identify and demonstrate appropriate use and conservation of resources, including disposal, reuse, or recycling of materials.

(3) The student applies ethical considerations in designing solutions. The student is expected to:

(A) define and evaluate constraints pertaining to a problem;

(B) identify safety considerations in designing engineering solutions with respect to the system, engineer, and user; and

(C) investigate and explain the importance and application of relevant legal and ethical concepts in computer science such as intellectual property, use of open-source software, attribution, patents, and trademarks.

(4) The student demonstrates an understanding of the structured methods used to collect and analyze information about customer needs. The student is expected to:

(A) analyze information provided by the customer to identify customer needs;

(B) create a process flow diagram based on customer needs to generate ideas for potential user actions, product functions, and design opportunities;

(C) develop a flowchart for a program using the results of a process flow diagram;

(D) create a target specifications table;

(E) identify and describe similar existing solutions; and

(F) construct a functional model based on customer needs to generate ideas for potential user actions, product functions, and design opportunities.

(5) The student develops a user interface and supplemental instructions. The student is expected to:

(A) identify essential tasks to be completed by the user;

(B) identify points of potential confusion or unexpected input by the user;

(C) design a software or user interface that clearly communicates to the user how to complete desired tasks;

(D) develop supplemental user instructions to inform the user of items that cannot be incorporated into an interface such as how to start the program or frequently asked questions;

(E) test a program and the program instructions with an individual who is not familiar with the project;

(F) evaluate and discuss feedback and results from new user testing;

(G) improve and refine a program and the program instructions based on feedback and results of testing; and

(H) re-test a program and the program instructions as necessary after modifications have been made in response to testing and identify any next steps.

(6) The student systematically reverse engineers a product, examines ways to improve the product, and identifies the type of re-design required to make that improvement. The student is expected to:

(A) write or perform tests, including break testing, for an existing program to determine functionality;

(B) describe unexpected findings from deconstructing existing code;

(C) examine and discuss relevant software libraries to determine their uses and functionality;

(D) construct a flowchart for an existing program;

(E) compare a program's current functionality to the customer's needs;

(F) identify and add missing customer specifications or needs to a program's flowchart;

(G) develop and explain new code that includes customer specifications or improves a product; and

(H) compare and discuss the predicted versus actual functionality of a product to generate ideas for redesign.

(7) The student applies concept generation and selection skills. The student is expected to:

(A) create and explain a black box and functional model of a system;

(B) implement brainstorming, mind mapping, concept sketching, and gallery walk activities to produce new ideas; and

(C) apply concept selection techniques such as a Pugh chart or a weighted decision matrix to design decisions.

(8) The student develops and applies engineering design process skills. The student is expected to:

(A) select and use appropriate tools and techniques to support design activities;

(B) report information about software design solutions in an engineering notebook;

(C) develop, test, and refine programming concepts throughout the development process;

(D) interpret and use an electrical diagram to build a circuit;

(E) create a circuit using a microcontroller, a breadboard, and multiple components;

(F) explain and apply the design process from different starting points by beginning with a baseline design;

(G) use a model or simulation which represents phenomena and mimics real-world events to develop and test hardware;

(H) critique and explain the usefulness and limitations of certain models;

(I) develop a prototype solution; test the prototype solution against requirements, constraints, and specifications; and refine the prototype solution; and

(J) report and describe a product's final design after the prototyping phase.

(9) The student applies mathematics and algorithms in programs. The student is expected to:

(A) apply mathematical concepts from algebra, geometry, trigonometry, or calculus to calculate the angle of a joint;

(B) apply mathematical calculations cyclically in a program using algorithms; and

(C) evaluate and verify algorithms for appropriateness and efficiency.

(10) The student develops computer programs to support design solutions. The student is expected to:

(A) design and explain software interfaces that communicate with hardware;

(B) identify and apply relevant concepts from computer science, science, and mathematics such as functions, electricity, and mechanics; and

(C) employ abstraction in a program by representing numerical sensor readouts in more intuitive variables and functions.

(11) The student develops and applies computer science skills. The student is expected to:

(A) integrate small discrete programs into a larger complete program solution using systems-thinking skills;

(B) use intuitive variable names correctly and add comments to code to improve readability;

(C) employ abstraction in a program by representing images as data arrays and representing numerical tone frequencies as variables;

(D) convert image information into the correct data type necessary for given library functions;

(E) develop an algorithm that includes logic such as "while" and "if" to accept user trackbar input and display image changes in real time;

(F) develop flowcharts, pseudocode, and commented code to document and explain software design solutions;

(G) design software interfaces that communicate with users and hardware;

(H) employ abstraction to program an interface, treating imported code as a "black box";

(I) employ abstraction by representing a joint as four points in a plane; and

(J) select and apply correct programming vocabulary and programming skills during program development.

(12) The student develops and uses computer programs to process data and information to gain insight and discover connections to support design solutions. The student is expected to:

(A) explain how to organize complex image and video data for processing;

(B) analyze complex data to make decisions and instruct users; and

(C) develop programs that use incoming data and algorithms to create output data, information, and commands.

*§127.697. Geographic Information Systems (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Principles of

Art, Audio/Video Technology, Principles of Information Technology, Physics for Engineers, or Principles of Applied Engineering. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) The Geographic Information Systems (GIS) course employs an analytic process using industry standard software to find trends and patterns in collected data. Whether collecting data first-hand or from reputable websites, GIS aims to use scientific methods to find solutions to various problems and issues.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student demonstrates knowledge and appropriate use of computer hardware components and software programs and examines how hardware and software are interrelated. The student is expected to:

(A) use operating systems, software applications, and communication and networking components appropriately;

(B) compare and appropriately use various input, processing, output, and primary/secondary storage devices;

(C) evaluate and select software based on quality, appropriateness, effectiveness, and efficiency; and

(D) solve digital file format and cross platform connectivity compatibility issues.

(2) The student uses data input skills. The student is expected to:

(A) incorporate into a product and use a variety of input devices such as keyboard, scanner, or mouse appropriately; and

(B) use digital keyboarding standards for the input of data.

(3) The student demonstrates knowledge and understanding of what GIS is and the use of GIS technology in different career fields. The student is expected to:

(A) identify historical and contemporary developments in GIS;

(B) describe the basic components of GIS; and

(C) identify appropriate application of GIS technologies in different career fields.

(4) The student demonstrates knowledge and appropriate use of database software. The student is expected to:

(A) design and construct a relational database from a geographic data model using a database software;

(B) use joins, hyperlinks, and relational linking appropriately within a database;

(C) convert data into a data depiction using classifications; and

(D) transfer data from different sources into a database for storage and retrieval.

(5) The student demonstrates knowledge and appropriate use of spatial databases and sources. The student is expected to:

(A) identify and use appropriately various spatial databases and sources such as digital terrain models, digital orthophoto quadrangles, geographic databases, land use and land cover data, digital imagery, hydrographic spatial data, and demographic data; and

(B) describe and demonstrate appropriate use of spatial analysis.

(6) The student demonstrates knowledge and appropriate use of GIS software. The student is expected to:

(A) determine the appropriate software tool from GIS to use for a given task or project;

(B) create queries and spatial queries for finding features, borders, centroids, and networks and determining distance, length, and surface measurements and shapes;

(C) describe characteristics of maps and spatial data; and

(D) identify and use geographical scales, coordinates, and specific map projections.

(7) The student demonstrates knowledge and appropriate use of GIS data collection devices. The student is expected to:

(A) plan and conduct supervised GIS and Global Positioning System (GPS) experiences;

(B) initialize and prepare a GPS receiver for data collection;

(C) collect geographical coordinates from a GPS receiver; and

(D) transfer data from a GPS device to a personal computer.

(8) The student acquires electronic information in a variety of formats. The student is expected to:

(A) collect electronic information in various formats, including text, audio, video, and graphics; and

(B) gather authentic data from a variety of electronic sources to use for individual and group GIS projects.

(9) The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:

(A) explain project management guidelines for designing and developing GIS projects; and

(B) design solutions for a project using visual organizers such as flowcharts or schematic drawings.

(10) The student produces a product using a variety of media. The student is expected to:

(A) publish information in a variety of formats, including hard copies and digital formats; and

(B) prepare a presentation of GIS information using graphs, charts, maps, and presentation software.

(11) The student examines GIS maps, reports, and graphs. The student is expected to:

(A) explain industry-standard legends used in GIS;

(B) describe symbols, scaling, and other map elements used in GIS;

(C) generate GIS reports and graphs; and

(D) create maps using a variety of map display types such as choropleth, heat maps, dot density maps, topographic maps, or graduated symbols maps.

*§127.698. Raster-Based Geographic Information Systems (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Geographic Information Systems. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) In Raster-Based Geographic Information Systems (GIS), students study local problems; acquire information, including images or aerial photographs; process the acquired data; and merge the acquired data with vector data. Students plan, conduct, and present solutions for locally based problems.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student demonstrates knowledge of the GIS field and related careers. The student is expected to:

(A) identify employment and career opportunities in GIS-related fields;

(B) identify and explore career preparation learning experiences, including job shadowing, mentoring, apprenticeship training, and preparation programs;

(C) identify industry certifications for GIS-related careers, including careers related to raster-based GIS; and

(D) discuss and analyze ethical issues related to GIS and technology and incorporate proper ethics in submitted projects.

(2) The student explores various roles in team projects. The student is expected to:

(A) explain the importance of teamwork in the field of GIS;

(B) describe principles of effective teamwork, including collaboration and conflict resolution; and

(C) explain common characteristics of strong team leaders and team members.

(3) The student investigates the history and use of aerial photography. The student is expected to:

(A) explain fundamental principles of cameras and lenses as they pertain to GIS and aerial photography;

(B) research and explain the history of aerial photography, including aerial platforms;

(C) explain various uses of aerial photography;

(D) compare vertical and oblique aerial photography; and

(E) identify cities, bridges, shorelines, roads and other important features in aerial photos.

(4) The student develops an understanding of electromagnetic and thermal radiation. The student is expected to:

(A) explain how forms of radiation propagate through space and interact with matter;

(B) research and describe the behavior of waves, including refraction, scattering, absorption, and reflection, in relation to radiation;

(C) describe the properties and laws of thermal radiation;

(D) compare the particle and wave models of electromagnetic energy;

(E) differentiate maps based on electromagnetic versus thermal radiation imagery; and

(F) evaluate whether electromagnetic or thermal radiation imagery is appropriate based on the conditions.

(5) The student explores active and passive microwave remote sensing. The student is expected to:

(A) compare active and passive microwave remote sensing;

(B) explain geographic characteristics, including surface roughness, moisture content, vegetation, backscatter and biomass, and urban structures, detected by remote sensing images; and

(C) provide a detailed analysis of radar images.

(6) The student learns the functions and applications of the tools, equipment, and materials used in GIS and raster-based analysis. The student is expected to:

- (A) describe how to use raster-based software;
- (B) download spatial data and raster images and re-project the data and images to match the Digital Orthophoto Quadrangle (DOQ) or Digital Orthophoto Quarter Quadrangle (DOQQ);
- (C) identify remote sensing equipment and describe the difference between the Global Positioning System (GPS) and the Global Navigation Satellite System (GLONASS);
- (D) describe GPS measurements and perform measurements with handheld GPS devices using GPS or GLONASS systems; and
- (E) compare the advantages, disadvantages, and limitations of remote or unmanned sensing.

(7) The student uses scientific practices in imagery analysis. The student is expected to:

- (A) plan and implement investigative procedures, including asking questions, formulating testable hypotheses, and selecting, handling, and maintaining appropriate equipment and technology;
- (B) collect GIS data;
- (C) organize, analyze, evaluate, make inferences, and predict trends from GIS data; and
- (D) communicate valid conclusions using appropriate GIS vocabulary, supportive maps, summaries, oral reports, and technology-based reports.

(8) The student uses project-management skills to research and analyze locally based problems. The student is expected to:

- (A) identify and collect data necessary to evaluate a local problem, including defining the problem and identifying locations of the concern;
- (B) develop a plan and project schedule for completion of a project developed to address a local concern using raster-based GIS technology;
- (C) create a GIS map to illustrate a problem using remote sensing images gathered from sites such as the National Aeronautics and Space Administration, National Oceanic and Atmospheric Administrations, and United States Geological Survey;
- (D) evaluate GIS map features to identify solutions to a problem;
- (E) develop solutions to minimize, reverse, or solve problem using raster-based GIS technology; and
- (F) organize and present findings related to a local problem in a final report or portfolio with data and solutions generated using raster-based GIS technology.

*§127.699. Spatial Technology and Remote Sensing (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit in a course from the Information Technology Career Cluster. Recommended prerequisites: Geographic Information Systems and Raster-Based Geographic Information Systems. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Information Technology career cluster focuses on the design, development, support, and management of hardware, software, multimedia, and systems integration services. This career cluster includes occupations ranging from software developer and programmer to cybersecurity specialist and network analyst.

(3) In Spatial Technology and Remote Sensing, students receive instruction in industry standard geospatial extension software and geospatial tools, including global positioning systems (GPS), and training in project management and problem solving related to geographic information systems (GIS).

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student demonstrates knowledge of the GIS field and GIS-related careers. The student is expected to:

- (A) identify employment and career opportunities in spatial technology and remote sensing related GIS fields;
- (B) describe and explore career preparation learning experiences, including job shadowing, mentoring, apprenticeship training, and preparation programs;
- (C) identify industry certifications for GIS-related careers, including careers that use or benefit from spatial technology; and
- (D) analyze and discuss ethical issues related to the field of spatial technology and remote sensing technology and spatial technology and remote sensing technology projects.

(2) The student applies basic GIS software knowledge and skills to explore the use of various geographic projections in GIS software. The student is expected to:

- (A) identify and use Mercator map projection;
- (B) identify and use Albers conic map projection; and
- (C) research and explain the evolution of and need for different map projections.

(3) The student explores the application of GPS technology. The student is expected to:

- (A) define and use data terminology related to GPS;
- (B) identify and use appropriately GPS receiver components;

(C) describe various applications of GPS coordinates such as locating fire hydrants, extinguishers, lighting, and parking lots; and

(D) compare the accuracy of GPS coordinates from different receivers such as smartphones, tablets, and GPS handheld devices.

(4) The student demonstrates knowledge and understanding of the types and components of unmanned remote sensing platforms. The student is expected to:

(A) identify major components of aerial, terrestrial, and submersible remote sensing platforms;

(B) determine the most appropriate remote sensing platform to use based on various conditions;

(C) differentiate the types of sensing systems used by each type of platform, including active, passive, spectrometer, radar, LiDAR, scatter meter, and laser altimeter platforms; and

(D) compare situations in which different unmanned remote sensing platforms and sensing systems might be used.

(5) The student demonstrates skills related to GIS data analysis. The student is expected to:

(A) evaluate findings and potential problems using GIS data;

(B) create models that represent collected GIS data;

(C) create, query, map, and analyze cell-based raster data; and

(D) analyze density, distance, and proximity of various data points using spatial analyst tools.

(6) The student analyzes geospatial socioeconomic data to create three-dimensional maps to demonstrate findings. The student is expected to:

(A) identify key sources of and gather and organize geospatial socioeconomic data;

(B) plan, organize, and create thematic maps;

(C) convert two-dimensional themes to a three-dimensional map to demonstrate features, distributions, and themes; and

(D) interpret, draw conclusions about, and justify findings related to geospatial socioeconomic data.

(7) The student uses spatial technology to develop and analyze a location map. The student is expected to:

(A) identify and collect data using GPS and unmanned systems and identify the boundaries and topography of a location;

(B) analyze how the location of a community impacts resources and hardships such as jobs or traffic in the community;

(C) create a map of a location that includes buildings and facilities, adjacent streets, and transportation sites using GIS software; and

(D) develop a map that includes categories for a facility's features such as restrooms, spaces allocated for core activities, emergency equipment, and excavation routes.

(8) The student documents spatial technology knowledge and skills. The student is expected to:

(A) create a spatial technology and remote sensing portfolio that includes attainment of technical skill competencies and sam-

ples of work such as location maps and spatial technology and remote sensing-based reports; and

(B) present a portfolio to peers or interested stakeholders.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Texas Education Agency

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## SUBCHAPTER N. LAW AND PUBLIC SERVICE

### 19 TAC §127.773

**STATUTORY AUTHORITY.** The new section is adopted under Texas Education Code (TEC), §7.102(c)(4), which requires the State Board of Education (SBOE) to establish curriculum and graduation requirements; TEC, §28.002(a), which identifies the subjects of the required curriculum; TEC, §28.002(c), which requires the SBOE to identify by rule the essential knowledge and skills of each subject in the required curriculum that all students should be able to demonstrate and that will be used in evaluating instructional materials and addressed on the state assessment instruments; TEC, §28.002(n), which permits the SBOE by rule to develop and implement a plan designed to incorporate foundation curriculum requirements into the career and technical education (CTE) curriculum; TEC, §28.002(o), which requires the SBOE to determine that at least 50% of the approved CTE courses are cost effective for a school district to implement; TEC, §28.025(a), which requires the SBOE to determine by rule the curriculum requirements for the foundation high school graduation program that are consistent with the required curriculum under TEC, §28.002; and TEC, §28.025(b-17), which requires the SBOE to adopt rules to ensure that a student may comply with the curriculum requirements under TEC, §28.025(b-1)(6), by successfully completing an advanced CTE course, including a course that may lead to an industry-recognized credential or certificate or an associate degree.

**CROSS REFERENCE TO STATUTE.** The new sections implement Texas Education Code, §§7.102(c)(4); 28.002(a), (c), (n), and (o); and 28.025(a) and (b-17).

§127.773. *Legal Research and Writing (One Credit), Adopted 2025.*

(a) Implementation.

(1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

(2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.

(b) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: at least one credit in a course

from the Law and Public Service Career Cluster. Recommended prerequisite: Court Systems and Practices. Students shall be awarded one credit for successful completion of this course.

(c) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Law and Public Service Career Cluster focuses on planning, managing, and providing legal services, public safety, protective services, and homeland security, including professional and technical support services.

(3) Legal Research and Writing provides an introduction to the study and practice of legal writing and research. This course is designed to introduce students to the methods and tools used to conduct legal research, develop and frame legal arguments, produce legal writings such as briefs, memorandums, and other legal documents, study U.S. Constitutional law, and prepare for appellate argument(s).

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(d) Knowledge and skills.

(1) The student conducts legal research. The student is expected to:

(A) plan a legal research strategy;

(B) access print and online research materials to find and analyze case law;

(C) describe the difference between mandatory and persuasive authority;

(D) research mandatory and persuasive case history using online databases such as Lexis-Nexis;

(E) explain how to Shepardize case law;

(F) critique other's legal writing(s) to determine whether cited case law and other legal sources were correctly referenced and relied upon for precedential holdings;

(G) evaluate and apply concepts found in Bluebook citation rules to one's writing.

(2) The student prepares, drafts, and defends legal arguments. The student is expected to:

(A) read and analyze case law;

(B) read and analyze case procedural history;

(C) apply legal precedent to current legal issues; and

(D) develop arguments based on research, relevant case law, statutes, and public policy.

(3) The student understands, prepares, and drafts legal documents. The student is expected to:

(A) use and interpret legal reference documents such as the Bluebook to follow and apply requirements for legal writing and citations;

(B) prepare and draft legal briefs that include standard elements, including an introduction, table of authorities, brief answer, introduction, argument, counter-argument, and conclusion;

(C) prepare and draft memoranda that follow a standard legal format; and

(D) prepare and draft other legal documents such as demand letters and pleadings.

(4) The student studies and analyzes U.S. Constitutional law. The student is expected to:

(A) analyze the relationship between the U.S. Constitution, Common Law, state law(s), and local law(s);

(B) analyze the legal, social, and historical implications of court decisions affecting the interpretation of the U.S. Constitution;

(C) predict possible outcomes of future cases and frame arguments in ways that are likely to garner the support of the judiciary;

(D) critique cases related to U.S. Constitutional law and other current legal issues such as free exercise clause, establishment clause, due process, and equal protection; and

(E) critique cases related to current legal issues.

(5) The student participates in a class moot court simulation. The student is expected to:

(A) research and evaluate case law on a current legal issue;

(B) read and evaluate appellant, respondent, and amici briefs associated with the chosen case;

(C) write an appellate brief; and

(D) prepare an oral argument and respond to questions during the presentation of the argument.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on June 16, 2025.

TRD-202502027

Cristina De La Fuente-Valadez

Director, Rulemaking

Texas Education Agency

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For further information, please call: (512) 475-1497



## **TITLE 34. PUBLIC FINANCE**

### **PART 11. TEXAS EMERGENCY SERVICES RETIREMENT SYSTEM**

#### **CHAPTER 302. GENERAL PROVISIONS RELATING TO THE TEXAS EMERGENCY SERVICES RETIREMENT SYSTEM**

### 34 TAC §302.1

The Board of Trustees (the "Board") of the Texas Emergency Services Retirement System (the "System") adopts an amendment to 34 Texas Administrative Code (TAC) §302.1, General Provisions Relating to the Texas Emergency Services Retirement System. The amendment is adopted without changes to the proposed text as published in the February 28, 2025, issue of the *Texas Register* (50 TexReg 1649). The rule will not be republished.

The amendment to §302.1 adds a definition for the term "spouse" as used for purposes of the System. Specifically, the definition helps clarify who is eligible for spousal death benefits and what is required to prove the existence of an informal marriage.

The amendment eliminates ambiguity and ensures the efficient administration of the System by establishing clear requirements for proving a legally recognized spousal relationship exists.

No public comments were received.

The amendment is adopted pursuant to Texas Government Code §865.006(b), which authorizes the Board to adopt rules necessary for the administration of the System.

No other statutes, articles, or codes are affected by this amendment.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on June 10, 2025.

TRD-202501962

Jessica Almaguer

Executive Director

Texas Emergency Services Retirement System

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Proposal publication date: February 28, 2025

For further information, please call: (512) 936-3422



### 34 TAC §302.7

The Board of Trustees (the "Board") of the Texas Emergency Services Retirement System (the "System") adopts the repeal of 34 Texas Administrative Code (TAC) §302.7, Employees of Participating Departments. The repeal is adopted without changes to the proposed text as published in the February 28, 2025, issue of the *Texas Register* (50 TexReg 1650). The rule will not be republished.

The purpose of the repeal is to eliminate §302.7, an interim rule that has since been replaced by 34 TAC §304.4, Employees of Participating Departments. The repeal is necessary to remove outdated language that no longer serves a purpose.

No public comments were received.

The repeal is adopted pursuant to Texas Government Code §865.006(b), which authorizes the Board to adopt rules necessary for the administration of the System.

No other statutes, articles, or codes are affected by this repeal.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

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Jessica Almaguer

Executive Director

Texas Emergency Services Retirement System

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For further information, please call: (512) 936-3422



## TITLE 37. PUBLIC SAFETY AND CORRECTIONS

### PART 1. TEXAS DEPARTMENT OF PUBLIC SAFETY

#### CHAPTER 28. DNA, CODIS, FORENSIC ANALYSIS, AND CRIME LABORATORIES SUBCHAPTER N. TEXAS CRIME LABORATORY RECORDS PORTAL

##### 37 TAC §§28.211 - 28.215

The Texas Department of Public Safety (the department) adopts new §§28.211 - 28.215, concerning Texas Crime Laboratory Records Portal. These rules are adopted with changes to the proposed text as published in the April 25, 2025, issue of the *Texas Register* (50 TexReg 2575) and will be republished.

These new rules implement Senate Bill 991, 88th Leg., R.S. (2023), which establishes an electronic discovery portal hosted by the department that makes crime laboratory records equally available to prosecutors and defense counsel.

The department accepted comments on proposed new §§28.211 - 28.215 through May 27, 2025. Comments were submitted by Lauren Woolridge with NMS Labs and District Attorney Philip Mack Furlow with the 106th District Attorney's Office. Several of the comments were questions on the portal mechanics relating to operational issues, instead of substantive comments on the rules. These items will be addressed by direct communication to the commenter. The comments received and the department's responses are summarized below.

#### COMMENT:

Written comments submitted by Ms. Woolridge indicate that record recipient contact information should be provided to the lab.

#### RESPONSE:

This comment relates to the operational mechanics of the portal and has no impact on the proposed rule. The department will continue to communicate and work with laboratories, prosecutors, and defense counsel in the implementation and operation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

#### COMMENT:

Written comments related to §28.212 submitted by Ms. Woolridge state that labs should be given instructions regarding resource availability and associated plans for setup support and

deployment of the portal with implementation timelines based on resource availability and key milestones.

**RESPONSE:**

This comment relates to the operational mechanics of the portal implementation and has no impact on the proposed rule. The department will continue to communicate and work with laboratories, prosecutors, and defense counsel in the implementation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.212(c) submitted by Ms. Woolridge recommend that instead of assigning a set number of cases, participation should be required based on the business' overall percentage of Texas casework.

**RESPONSE:**

The department disagrees with this comment. This recommendation would result in an undue burden on smaller laboratories while simultaneously exempting larger laboratories with more prevalent caseloads in Texas. For example, if a percentage was set at 10%, a small laboratory only capable of working ten cases per year, one of which was in Texas, would be required to participate in the portal. Whereas a large laboratory working 100,000 cases per year could work up to 9,999 cases without participating in the portal. This would result in an imbalance that is not in the best interest of discovery practices in the state of Texas. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.213 submitted by Ms. Woolridge state that the proposed rules do not provide guidance on how to isolate and securely transfer only Texas-relevant data to the portal. She indicates without clear segregation requirements, there is a risk of over-disclosure or inadvertent sharing of non-Texas or non-criminal case data. Ms. Woolridge also suggests the department define how the request mechanism will work and establish a request notification system to ensure compliance.

**RESPONSE:**

This comment relates to the operational mechanics of the portal and has no impact on the proposed rule. The department will continue to communicate and work with laboratories, prosecutors, and defense counsel in the implementation and operation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.213 submitted by Ms. Woolridge state that labs can produce 30,000+ reports in a calendar year where less than 10% are needed for court and suggests the department rephrase the rule to be in alignment with Government Code §411.162 to include the following language, "Requested case specific records..." in order for labs to comply for records specifically requested.

**RESPONSE:**

The department disagrees with this comment. The proposed rule was developed in collaboration with a diverse group of stakeholders from the criminal justice community, including representatives from forensic laboratories, prosecutors, and

defense attorneys. Through that process, it was determined that providing complete case records through the portal regardless of whether the records were requested for a specific court proceeding best supported transparency, consistency, and timely access to information in criminal litigation. In addition, discovery requirements under Texas Code of Criminal Procedure, Article 39.14 are not limited to records needed for court. It is the department's position that the rule aligns with the statutory intent and reflects a balanced approach. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.213 submitted by Ms. Woolridge recommend including a specific timeframe by which records must be uploaded, such as one month, instead of "as soon as practicable" because it lacks specificity. Ms. Woolridge also requested to clarify how attorneys in the state of Texas will know when and how to make requests for case records.

**RESPONSE:**

The department disagrees with this comment. The phrase "as soon as practicable" is consistent with language in the Texas criminal discovery statute under Texas Code of Criminal Procedure, Article 39.14, and provides flexibility while considering feasibility and practicality. The second part of the comment relates to the operational mechanics of the portal and has no impact on the proposed rule. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.214(a) submitted by Ms. Woolridge suggest allowing proprietary records to be flagged and made available only upon request through an NDA, subpoena, or a protective order and allow for the file request mechanism to support file attachments for subpoenas to be included with the request.

**RESPONSE:**

This comment relates to the operational mechanics of the portal and has no impact on the proposed rule. The department will continue to communicate and work with laboratories, prosecutors, and defense counsel in the implementation and operation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

**COMMENT:**

Written comments related to §28.214(b) submitted by Ms. Woolridge recommend aligning the request mechanism in the portal to include both case and non-case specific records to streamline the process for both the lab and the attorneys; providing additional instructions regarding multiple or supplemental requests following use of the request mechanism through the portal, including guidance on how to conduct communications related to the request; standardizing the education for attorneys and courts on locating documents needed; providing instruction to the lab regarding document hierarchy, data tags, and search criteria to better understand how documents must be made available within the portal; and standardize the education for attorneys and courts on locating documents needed.

**RESPONSE:**

These comments relate to the operational mechanics of the portal and have no impact on the proposed rule. The department will continue to communicate and work with laboratories, prose-

cutors, and defense counsel in the implementation and operation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

COMMENT:

Written comments related to §28.215 submitted by Ms. Woolridge related to the safety and security of portal contents and was a series of questions instead of comments or recommendations on the rule proposal.

RESPONSE:

The questions either relate to the operational mechanics of the portal and have no impact on the proposed rule or ask for legal advice, which is beyond the scope of the rulemaking process. The department will continue to communicate and work with laboratories, prosecutors, and defense counsel in the implementation and operation of the portal as it continues to be developed. No changes were made to the proposed rule based on this comment.

COMMENT:

Written comments related to §28.215 from Mr. Furlow state this section exceeds the scope of the statute by requiring a prosecutor to "maintain up-to-date portal access" for, rather than merely designate, defense counsel and by expanding that duty to include unnamed "others" who may not be included within the scope of the statute. Mr. Furlow also states the phrase "maintain up-to-date portal access" is ambiguous and could be read to mandate more than mere identification of who can use the portal. In lieu of the proposed rule, Mr. Furlow suggests the department consider language more consistent with the statute as follows: Attorneys representing the state must identify at least one contact in their office to designate and keep up to date the person or persons who should be authorized to access the portal under Government Code §411.162.

RESPONSE:

The department does not oppose this recommendation and will adopt the rule with changes as it more closely aligns with the statutory language and does not result in a substantive change. Rule text language in §28.215 is being changed from "Attorney representing the state must designate at least one administrator to maintain up-to-date portal access to defense counsel and others assigned to the case consistent with Texas Code of Criminal Procedure, Article 39.14 (d), (e), and (f)" to "Attorneys representing the state must identify at least one contact in the attorney's office to designate and keep up to date the person(s) authorized to access the portal under Government Code, §411.162."

These rules are adopted pursuant to Texas Government Code, §411.004(3), which authorizes the Public Safety Commission to adopt rules considered necessary for carrying out the department's work; §411.162, which authorizes the department by rule to establish and maintain a central computerized portal that facilitates the process for requesting crime laboratory records among crime laboratories, attorneys representing the state, and parties authorized to access the records pursuant to Article 39.14, Code of Criminal Procedure; §411.163, which authorizes the department by rule to require mandatory participation in the transfer of crime laboratory records using the crime laboratory portal and provide exemptions; §411.164, which authorizes the department by rule to require the attorney representing the state to provide access and use of the crime laboratory portal to the defense; and Senate Bill 991, 88th Leg., R.S. (2023).

§28.211. *Definitions and Purpose.*

(a) In this subchapter, the terms "accredited field of forensic science" and "forensic examination or test not subject to accreditation" have the meanings provided by Texas Code of Criminal Procedure, Article 38.01; and the terms "crime laboratory," "criminal action," and "forensic analysis" have the meanings provided by Texas Code of Criminal Procedure, Article 38.35.

(b) The Texas Crime Laboratory Records Portal (the portal) administered by the department, as required by Texas Government Code, §411.162, is a central computerized portal that facilitates the sharing of crime laboratory records between crime laboratories, attorneys representing the state, and defense counsel. The purpose of the portal is to ensure that attorneys representing the state and defense counsel have equal access to relevant forensic analysis records.

§28.212. *Mandatory Participation and Exemption.*

(a) All crime laboratories that operate disciplines in an accredited field of forensic science and conduct forensic analysis for use in a criminal action in Texas must participate in the portal by transferring crime laboratory records as soon as practicable through the portal for at least those accredited fields of forensic science. A crime laboratory may also choose to participate in the portal for any forensic examination or test not subject to accreditation but for which the crime laboratory performs casework.

(b) A crime laboratory that only performs forensic examinations or tests not subject to accreditation is not required to participate in the portal but may choose to participate.

(c) A crime laboratory located outside of Texas but accredited by the Texas Forensic Science Commission that performs an average of fewer than 300 cases annually in Texas during the immediately preceding five-year period may submit a request to be designated exempt from mandatory participation in the portal.

(1) A crime laboratory's request to be designated exempt from mandatory participation must be made to the DPS Crime Laboratory Records Program Manager (manager) at [CLRConnect@dps.texas.gov](mailto:CLRConnect@dps.texas.gov).

(2) The manager must respond to the request for exemption within 60 days of receipt of the request.

(3) A crime laboratory that is denied an exemption request may appeal that decision to the DPS Crime Laboratory Division Chief by mailing an appeal request with relevant information, including the exemption request and the response, to: Crime Laboratory Division Chief, Texas Department of Public Safety, Attn: CLR Connect Exemption Appeal, 5805 N. Lamar Blvd. (MSC 0460), Austin, Texas 78752.

(d) Exemptions are effective for two years. Subsequent exemption requests are not guaranteed and must be requested no fewer than 60 days before the exemption expires.

(e) The department must provide a list on the portal webpage of each crime laboratory that has been designated exempt from mandatory portal participation with the exemption effective date.

(f) A crime laboratory, regardless of an exemption designation, must continue to comply with all discovery obligations as set forth by Texas Code of Criminal Procedure, Article 39.14.

§28.213. *Records Available Through the Portal.*

All case-specific records related to a criminal action's forensic analysis that have reached a crime laboratory's designated completion step must be made available through the portal as soon as practicable and obtainable by any authorized user with sufficient rights to access that case. A case-specific record is a record pertaining solely to a single case or cases linked to a specific criminal action.

§28.214. *Records Available Through the Portal or Public Website.*

(a) A crime laboratory must make non-case-specific records available either through the portal or on the crime laboratory's public website. A non-case-specific record is a record relevant beyond a single case or cases linked to a specific criminal action, including information on instruments, techniques, laboratory personnel, or general methodologies. Crime laboratories that make records available on a public website must include information related to the location of those records on the portal.

(b) The portal must include a process for requesting non-case-specific records not otherwise available through the portal or made publicly available on a crime laboratory's website.

§28.215. *Prosecutor Responsibility to Provide Defense Counsel Access to the Portal.*

Attorneys representing the state must identify at least one contact in the attorney's office to designate and keep up to date the person(s) authorized to access the portal under Government Code, §411.162.

The agency certifies that legal counsel has reviewed the adoption and found it to be a valid exercise of the agency's legal authority.

Filed with the Office of the Secretary of State on June 13, 2025.

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D. Phillip Adkins

General Counsel

Texas Department of Public Safety

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For further information, please call: (512) 424-5848

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