The Texas A&M University System
The Texas A&M Engineering Extension Service
Standard Administrative Procedure

11.99.99.N0.04 TEEX Curriculum Development

Approved: July 18, 2007
Revised: January 30, 2014
Revised: June 30, 2023
Next Scheduled Review: June 30, 2028

Summary

The purpose of this document is to provide the procedures for developing, approving, and maintaining Texas A&M Engineering Extension Service (TEEX) training curriculum. The goal of TEEX training is to provide realistic, relevant, and impactful training and services for people who want to make a difference in their communities.

This procedure does not apply to the following:
- Materials developed by or for a contract or third-party partner
- Materials used for presentations at workshops or conferences
- Plans developed for a contract or third-party partner
- Tabletop exercises and drills

Definitions

Asynchronous: Online learning that is not dependent on a scheduled activity or time and can be completed, at the participant's pace, within the subscription period.

Blended Learning: A training course in which a portion of the course is delivered online and a portion is delivered via face-to-face training. The online portion is typically an asynchronous delivery; however, synchronous deliveries are allowed.

Needs Assessment: A method by which one determines the requirements, needs, gaps in knowledge or skills, or expectations of a learner prior to a learning event or learning program. Needs analysis methods may include focus groups, questionnaires, surveys, participants' comments and suggestions, records, reports, tests, self-assessments, print media, observations, work samples, industry requirements, research, customer requests, etc.

Online Training: A training course delivered virtually in either a synchronous or asynchronous format that does not require an in-person component for course completion. This may also be referred to as eLearning.

<u>TEEX Training Curriculum:</u> Courses that belong to—or are developed by—TEEX, where TEEX has ownership and/or intellectual property interest. TEEX training curriculum does not include third-party training, tabletop exercises, and materials or plans created for a contract/third-party partner, workshop, or conference.

<u>Training (TR):</u> A well-defined unit of instruction that consists of objectives, an assessment strategy, an end of course evaluation, and course products.

Requirements

This Standard Administrative Procedure (SAP) encompasses the curriculum development process. All courses must have a completed needs assessment with approval to move forward with the development/revision before the curriculum development process can begin. During proposal/contract writing and/or agreement drafting, curriculum personnel must be consulted to ensure the scope of work meets curriculum standards outlined in this SAP.

1. **General**
   1.1. The TEEX Training Curriculum Development Model (referred to as ADDIE) includes the following elements as a baseline for development:
      1.1.1. Analysis
      1.1.2. Design
      1.1.3. Development
      1.1.4. Implementation
      1.1.5. Evaluation
   1.2. Although the ADDIE model is the baseline for TEEX, divisions may select another model, or elements of other models, that better supports their development needs (e.g., Successive Approximation Model [SAM]).
   1.3. Course products may include, but are not limited to, instructor guides, participant manuals, PowerPoints, videos, handouts, study guides, activity packets, exams, quizzes, matrices, and course content on the Learning Management System (LMS) in accordance with the TEEX Curriculum Development Handbook (in development), TEEX Curriculum Style Guide, and any supporting documents. Applicable materials are selected by the division according to the needs of the course.
   1.4. All training courses must have an assessment strategy to ensure that participants have successfully achieved learning outcomes. Assessment mechanisms will vary based on the needs of the course.
   1.5. TEEX curriculum may be subject to external regulations and standards issued by organizations and/or enforcement bodies including, but not limited to, National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), Texas Commission on Environmental Quality (TCEQ), Texas Commission on Fire Protection (TCFP), and/or Texas Commission on Law Enforcement (TCOLE).
   1.6. The curriculum process must include a needs assessment that includes participant performance, participant course evaluations, input from advisory organizations, or instructor feedback.
2. **Responsible Parties**
   2.1. The Network and Information Services (NIS) department is responsible for:

      2.1.1. Providing policies and guidelines on electronic and information technology accessibility

      2.1.2. Providing necessary information technology support for the Online Registration System (OLR), Student Management System (SMS), TEEX Student Portal and Learning Management System (LMS)

      2.1.3. Serving as the custodian for the OLR, SMS, TEEX Student Portal, and LMS

      2.1.4. Serving as the service owner for the LMS

      2.1.5. Serving as the primary/initial helpdesk contact for technical issues

  2.2. The Strategic and Education Services (SES) department is responsible for:

      2.2.1. Providing oversight, management, and quality assurance of TEEX curriculum

      2.2.2. Publishing agency-level style guides and procedural documents for TEEX curriculum

      2.2.3. Serving as the information owner for the OLR, SMS, TEEX Student Portal, and LMS

  2.3. The divisions are responsible for:

      2.3.1. Establishing the requirements for courses

      2.3.2. Developing and managing curriculum

      2.3.3. Reviewing and updating curriculum in accordance with SAP and other relevant requirements

      2.3.4. Publishing curriculum documents that support agency-level documentation, such as the TEEX Curriculum Development Handbook (in development) and TEEX Curriculum Style Guide

      2.3.5. Providing quality control of TEEX curriculum

      2.3.6. Providing all helpdesk-referred assistance for curriculum on the LMS

      2.3.7. Ensuring the security of all curriculum-related intellectual property

      2.3.8. Designating personnel to manage the curriculum development, review, and revision process

3. Phases of Development

  3.1. The TEEX curriculum development process consists of three phases:

      3.1.1. Phase I – Establishment of course goal and objectives

      3.1.2. Phase II – Course development

      3.1.3. Phase III – Course finalization and approval, Continuing Education Units (CEU), export control, and registration capability

  3.2. Phase I

      3.2.1. Phase I includes using the needs assessment to establish course goals and objectives.

      3.2.2. Course objectives are established using measurable action verbs categorized according to Bloom's Taxonomy.

      3.2.3. A draft Course Design Document (CDD) (SES-45) must be completed for each course.

      3.2.4. Course hours are determined based on course content (e.g., lecture, hands-on skills, online beta testing [where applicable]), external regulations and standards, and/or program/customer needs.

  3.3. Phase II

      3.3.1. Phase II includes the development of the curriculum, including supplemental documents and online components, that meet the objectives established during Phase I.

3.3.1.1. Supplemental documents include third-party resources, such as industry standards and job aids.

3.3.2. Curriculum materials must be created in accordance with TEEX Curriculum Development Handbook (in development), TEEX Curriculum Style Guide, and supporting documents.

3.3.3. The technology, instructional methods, and participant assessments chosen for a course is dependent on a variety of factors, such as budgetary considerations, customer needs, and course content, and are supported by instructional materials that are suitable for the attainment of the course objectives and appropriate for the population being served, including different learning modalities.

3.3.4. Curriculum and other documents/supplemental items undergo a review once they are developed. Divisions conduct alpha and beta testing of online courses or the asynchronous online component of a blended course.

3.4. Phase III

3.4.1. Phase III includes agency curriculum approvals, the assignment of CEUs, if applicable, and publishing of courses for registration purposes.

3.4.2. The finalized documents, including the CDD, are reviewed by the division curriculum manager, or designee, prior to submitting the course for agency approval/assignment of CEUs.

3.4.3. All TEEX training curriculum must be reviewed at the agency level by the TEEX Accreditation and Curriculum Manager for the following:

3.4.3.1. Learning objectives are developed based on the needs assessment (in development).

3.4.3.2. Content logically aligns with the stated learning objectives.

3.4.3.3. Course content is current, effective, and applicable for targeted participants.

3.4.3.4. Course content provides realistic, relevant, and impactful training and services that align with the agency's mission and values.

3.4.3.5. Instructional methods are appropriately matched to achieve learning objectives and incorporate adult learning principles.

3.4.3.6. Assessments measure the achievement of the learning objectives.

3.4.3.7. All curriculum material and content adhere to publication standards, template design, and formatting parameters and meets established agency standards of appearance, content, and Bloom's Taxonomy.

3.4.4. Agency approval of curriculum and assignment of CEUs are completed by the TEEX Accreditation and Curriculum Manager using the SES Curriculum Approval Checklist (SES-46) and Curriculum Approval Form (SES-06).

3.4.4.1. Agency approval of curriculum must be conducted for TEEX training curriculum and are noted in SMS.

3.4.4.2. If CEUs are requested by the division curriculum department, agency approval for CEUs is completed in accordance with SAP 99.99.99.N0.07 *IACET Continuing Education Units (CEUs).*

3.4.5. Curriculum is also reviewed for export controls by the TEEX Compliance Office in accordance with Rule 15.02.99.N1 *Export Controls Program Management.*

3.4.6. An electronic copy of the SES-06 form is retained by the TEEX Accreditation and Curriculum Manager and sent to the division curriculum manager.

3.4.7. Each division is responsible for ensuring the course is ready for registration, including live on the website if necessary.

4. **Curriculum Maintenance**

4.1. Curriculum must be reviewed (and revised, if necessary), at a minimum once every five years to ensure quality, currency, effectiveness, and applicability.

4.2. TEEX curriculum may be reviewed and revised sooner if required by a change in industry standards or certification/licensing requirements or as subject to external regulations and standards issued by organizations and/or enforcement bodies, such as those listed in 1.5.

4.3. Based on the results of the curriculum review, curriculum staff must take one of the following actions:

4.3.1. If revisions are necessary, the curriculum revision/maintenance process follows the phase process outlined in Section 3 of this SAP.

4.3.2. If revisions are not required, the course is submitted for Phase III approval with documentation as outlined in Section 3.4 of this SAP. This documentation must also include the reason why revision is not required at this time.

5. **Storage and Retention**

5.1. Security of Curriculum

5.1.1. All electronic curriculum documents must be stored in accordance with *TEEX SAP 29.01.03.N0.01 Information Security Program.*

5.1.2. All TEEX curriculum copyright ownership resides with the agency. TEEX training curriculum is the exclusive and sole intellectual property of TEEX unless contractually stipulated otherwise.

5.1.3. TEEX divisions are responsible for the security of the TEEX curriculum under their stewardship. Divisions may implement more—but not less—stringent curriculum security measures in order to meet their business needs.

5.1.4. The minimum security procedures are:

5.1.4.1. The SES Department must have access to all TEEX curriculum in a TEEX-designated and secured electronic location.

5.1.4.2. Division curriculum personnel are responsible for securing and delivering content and must take appropriate and practical measures to protect TEEX curriculum while not restricting reasonable and acceptable business use cases in accordance with agency guidelines.

5.1.4.2.1. Electronic copies of press-ready curriculum must be stored in a designated and secure environment.

5.1.4.2.2. Locked and secured PDF files are considered the minimum-security protection for distribution outside of the TEEX secured electronic location.

5.1.4.2.3. Divisions must establish a point of contact and determine the appropriate sharing of such secured curriculum, including the electronic distribution of materials to participants or instructors.

5.2. Retention of Curriculum

5.2.1. Curriculum files (hard copy and/or electronic) are retained in accordance with the Texas A&M University System (TAMUS) record retention schedule.

5.2.2. Curriculum files must be reviewed by division personnel before disposal as some files may merit permanent retention for historical reasons.

Quality Assurance Measures

1. The TEEX Accreditation and Curriculum Manager will send out a report to the division curriculum managers twice each fiscal year. This report will list the curriculum that has not been reviewed, approved, and/or entered into SMS by SES within the last five years and curriculum with approvals that expire in the next two years.

2. If a curriculum has not been reviewed as outlined in Section 4 of this SAP, the division must return a plan for renewing or decommissioning the course in accordance with Section 4. Outdated courses may receive a 1-year provisional renewal from the Accreditation and Curriculum Manager. Courses that do not include a curriculum maintenance plan for the provisional year and/or that are not up to date by the end of the provision period will be inactivated from accepting registrations and may not be taught until they have been reviewed and/or revised according to the stipulations in this SAP.

Related Statutes, Policies, or Requirements

IACET Category 5: Learning Outcomes (5.1, 5.2)
IACET Category 6: Content and Instructional Requirements (6.1, 6.2, 6.3, 6.5)
IACET Category 7: Assessment of Learning Outcomes (7.1, 7.2)
ACCET Standard IV Curriculum Design and Development, Sections A, B and D
ACCET Standard V Instructional Delivery and Resources, Sections A & B
CALEA Chapter 6.3 Instructional Design
CALEA Chapter 6.4 Development of Content and Materials
CALEA Chapter 6.5 Training Delivery
CALEA Chapter 6.6 Training Evaluation
TEEX SAP 03.01.99.N0.01 – TEEX Delivery Types as Metrics for Agency Mission
TEEX Rule 15.02.99.N1 – Export Controls Program Management
TEEX SAP 99.99.99.N0.07 – IACET Continuing Education Units (CEUs)
Section 508 of the Rehabilitation Act of 1973

SES-06 Form – Curriculum Approval
SES-30 Form – Course Needs Assessment (Being revised)
SES-45 Form – Curriculum Course Design Document (CDD)
SES-46 Form – SES Curriculum Approval Checklist
TEEX Curriculum Development Handbook (In development)
TEEX Curriculum Style Guide
TAMUS Records Retention Schedule

Office of Responsibility

Strategic and Education Services (SES) - Curriculum
979-209-0921