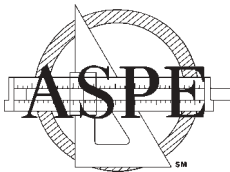


**Criteria and Guidelines
for
ASPE
Chapters
to
Issue
Continuing Education
Units**



American
Society of
Plumbing
Engineers

The *Criteria and Guidelines for ASPE Chapters to Issue Continuing Education Units* is designed to provide accurate and authoritative information, and establish minimum standards, to assist and prepare Chapters for the proper use and issuing of Continuing Education Units (CEUs). The American Society of Plumbing Engineers (ASPE) makes no guarantees or warranties, expressed or implied, regarding the data and information contained in this publication, or that the use of the information in this publication ensures acceptance of Chapter awarded CEUs by ASPE or any other organization or government agency. All data and information is provided with the understanding that ASPE is not engaged in rendering legal, consulting, engineering or other professional services.



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About the Continuing Education Unit (CEU)

The CEU is in the public domain. Use of the CEU is voluntary and no permission or approval is required. The decision to award the CEU is made by the provider and should be based on a thorough review of the provider's capabilities in meeting the CEU criteria.

What is the Continuing Education Unit (CEU)?

The Continuing Education Unit (CEU):

- ¥ provides a standard unit of measure,
- ¥ quantifies continuing education and training activities, and
- ¥ serves the diversity of providers, activities, and purposes in continuing education.

How is the CEU valued?

One (1.0) CEU = ten (10) contact hours of participation in organized continuing education experience under responsible, qualified direction and instruction.

Who can give CEUs?

No one organization owns the CEU. Any group or organization, including ASPE Chapters, can offer the traditional CEU. However, there are groups and organizations which award the CEU and which do not adhere to the proper and necessary standards. Because of this, there is misunderstanding and distrust of the value of the CEU.

Are there any standards governing the issuing of CEUs?

Yes there are. There is at least one organization, the International Association for Continuing Education and Training (IACET), that has assumed responsibility for refining and disseminating information about the CEU. Through its programs, publications, research, and technical assistance, IACET assists organizations in correctly utilizing the criteria.

To ensure quality in continuing education and training programs and to increase confidence and credibility in the CEU and those groups and organizations which adhere to the standards, IACET established the Authorized Providers Program. This program provides recognition for providers who adhere to the criteria and are willing to have their programs assessed by the Authorized Providers Commission.

To distinguish between the generic CEU and the CEU granted by IACET Authorized Providers, the Association restricts the use of its IACET CEU and Authorized Provider logos to providers which are certified as Authorized Providers by IACET.

Must a group or organization or ASPE Chapter join IACET to give CEUs?

No. Any group or organization may issue CEUs. However, for credibility and confidence in the CEUs issued, the ASPE Chapter should comply with the generally accepted CEU criteria and guidelines to which the majority of issuing agencies adhere.

Criteria and Guidelines for ASPE Chapters to Issue CEUs

The criteria and guidelines for issuing CEUs represent a systematic approach to assist ASPE Chapters which award the CEU in interpreting and applying the standard. There are 12 general criteria.

1. ASPE Chapter

The Chapter must have an identifiable continuing education or training unit or committee with assigned responsibility for administering continuing education or training activities, courses, or programs.

Guidelines

All ASPE Chapters are eligible to award the CEU (providers include those that are chartered, incorporated, or a recognized proprietorship or governmental unit). The Chapter should have a well-defined organizational structure in which the authority and responsibility for administering continuing education or training activities is assigned to a particular unit, committee, or individual within the Chapter, which can ensure each of the CEU criteria are met.

The ASPE Chapter's continuing education committee or unit should be clearly identified within the Chapter's organizational structure. The activities of the ASPE Chapter must support ASPE's mission. This support is evidenced by the ASPE Chapter's Charter and its adherence to the Society's mission statement that defines the Chapters' and the Society's responsibilities.

2. Responsibility and Control

The ASPE Chapter, through its continuing education or training unit, ensures certification criteria are followed. The Chapter's internal policies should clearly show the continuing education unit has authority and responsibility to establish and implement review procedures that ensure education and training activities meet current CEU criteria.

Guidelines

The ASPE Chapter should designate one person as the continuing education and training administrator who is responsible for ensuring that all CEU criteria are followed. The individual designated by the Chapter as the education and training administrator must be qualified by experience or training to ensure that all requirements and procedures are followed. (For example, the Chapter Education Chairperson or the Vice President, Technical would be the preferred individuals.)

3. System for Awarding the Continuing Education Unit

The ASPE Chapter has a system in place to identify learners who meet requirements for satisfactory completion.

Guidelines

The Chapter's designated continuing education or training individual, verifies and reports that each learner has (or has not) met the specified

requirements for satisfactory completion and is (or is not) awarded CEUs or other measurement units.

The Chapter should have a process for calculating CEUs which includes the provision that there be no retroactive granting of CEUs. If units other than the CEU are awarded, the process will include a conversion formula or explanation so that the equivalent CEU can be determined.

The Chapter should establish permanent individual records indicating the number of CEUs awarded to each learner. Only learners who successfully complete an activity, course, or program are awarded CEUs (or other units).

4. Maintenance and Availability of Records

The ASPE Chapter is required to maintain a complete, permanent (or a minimum of at least 7 years) record of each learner's participation and be able to provide a copy of that record upon request.

Guidelines

The ASPE Chapter is responsible for maintaining permanent records of all CEUs earned and must have a written policy on retention and releasing of such records that ensures the privacy and security of its learners' records. The Chapter is expected to maintain a permanent record for each learner who successfully completes an activity, course, or program and to record the number of CEUs earned. Cumulative records of all CEUs earned are to be available for a minimum of 7 years and are to be issued as an official permanent record upon request by the learner.

The permanent record may be maintained by the Chapter or a contracted service [e.g., The International Registry for Continuing Education and Training; (202) 939—9432, is one agency which provides this service through a contract]; however, the Chapter bears the primary responsibility for maintenance and availability of permanent records. (There are organizations that, for a fee, will provide a registry for Continuing Education and Training for those Chapters wishing to contract the service. This registry assures that a permanent record is maintained and individuals can be provided transcripts of their education activities.) A permanent record is an official cumulative record or file issued by the ASPE Chapter that documents an individual's participation in the Chapter's activities. This individual record should include:

- ¥ Chapter name and address.
- ¥ Learner's name, title, organization/company affiliation, address, ASPE membership number and social security number (or other numerical identification).
- ¥ Activity, course, or program title (title should be as descriptive as possible).
- ¥ Completion date of the activity, course, or program.

¥ Hours of actual instruction contact and number of CEUs awarded. (If units other than the generally accepted CEUs are awarded, the transcript will include a conversion formula/explanation so that the equivalent CEUs can be determined.)

Additional information, such as e-mail address, telephone number and assessment scores may be included at the option of the Chapter.

5. Learning Environment and Support Systems

The ASPE Chapter provides learning outcomes, learning environments and support services that are appropriate to the continuing education or training goals.

Guidelines

The ASPE Chapter needs to determine education or training resources required and provide a means of ensuring their availability to support the learning outcomes for each education or training activity. Resources include: financial resources and administrative support; the learning environment and support systems (e.g., technology, facilities, library or reference materials; and access to instructors and advisors, and instructional aids and equipment).

The design and use of facilities should facilitate teaching and learning. For example, lighting, sound, seating, visuals, reference materials, and other needed resources should be appropriate and available to enhance learning.

6. Needs Identification

The ASPE Chapter ensures that each activity, course, or program is planned in response to identified needs of a target audience.

Guidelines

The purpose of identifying learning needs is to identify the difference between an existing condition and a desired condition which becomes the foundation for any education or training activity, course, or program.

Needs represent a shortage/deficit condition or a required enhancement in contrast to interests or wants, which usually represent personal preferences. Needs may arise from a variety of reasons such as the Certified In Plumbing Engineering (CIPE) recertification requirements, new legislation or regulations; new performance expectations or deficiencies; or changes in information, skills, attitudes, processes, technologies, materials, methods and systems. Some methods for assessment include: focus groups, questionnaires and surveys, participants comments and suggestions, records and reports, tests or self—assessments, print media, observations, and work samples.

7. Learning Outcomes

The ASPE Chapter should have a clear and concise written statement of intended learning outcomes (e.g., participant behavioral or performance objectives) based on identified needs for each continuing education and training activity, course, or program.

Guidelines

Learning outcomes, commonly referred to as participant behavioral or performance objectives, are written statements developed from identified needs, and which:

- ✘ Provide a framework for activity, course, or program planning;
- ✘ Are the basis for selection of content and instructional strategies;
- ✘ Describe to learners exactly what knowledge, skills, and/or attitudes they are expected to accomplish/demonstrate as a result of the learning activity, course, or program;
- ✘ Are the basis providing periodic feedback, measuring progress, and final assessment of learning.

The learning outcomes must be clear, concise, measurable and provided to the potential learners.

8. Activity, Course, or Program Planning and Instructional Personnel

The ASPE Chapter should ensure that qualified personnel are involved in planning and conducting each activity, course, or program.

Guidelines

The Chapter is responsible for assuring that qualified individuals are directly involved in determining the activity, course, or program purpose, and planning, designing, developing, conducting, and evaluating each learning experience. The continuing education administrator has oversight responsibilities and should be directly involved in this phase of activity, course, or program development.

It is the joint responsibility of the Chapter, the planner(s), and the instructor(s) to ensure that the continuing education activity, course, or program is engineering related, and has value to the learner and that the instructor(s) has competence in the subject matter, and the ability to communicate and facilitate the learning experience.

Learners who participate in an educational or training activity, course, or program have the right to know of any commercial interest an instructor may have in a product or service mentioned during an activity, course, or program. The Chapter is required to disclose each instructor's proprietary interest in any product, instrument, device, equipment, service, or material discussed in the activity, course, or program as well as the source of compensation related to the presentation. This information must be made available to the learners prior to the activity, course, or program and may be conveyed through promotional materials, a written handout, and/or an announcement prior to the commencement of the training.

9. Content and Instructional Methods

The ASPE Chapter needs to ensure that content and instructional methods are appropriate for the learning outcomes of each activity, course, or program and provide opportunities for learners to participate and receive feedback.

Guidelines

Both learners and instructors must understand the learning outcomes and how they will be achieved and that the program content is organized in a logical manner, proceeding from basic to advanced levels. Instructional methods should appeal to diverse learning styles and the methods used should provide opportunities for learners to be actively involved, interact with the instructor(s) and materials (as well as other students, where applicable), process what they have learned, and receive feedback that reinforces learning. (Training materials, handouts and audio—visual presentations help ensure learner participation and that learning outcomes are achieved.)

The Chapter must take steps to protect intellectual property rights, i.e., ownership, writer compensation, copyright, and the utilization of revenue derived from the creation, production, and use of materials produced for the educational activity, course, or program.

10. Assessment of Learning Outcomes

The ASPE Chapter should establish formal processes or procedures during the activity, course, or program planning to be used to assess achievement of the learning outcomes.

Guidelines

Formal assessment of learning outcomes refers to specific process(es) through which learners demonstrate the attainment of learning outcomes. In every activity, course, or program for which CEUs are awarded, there is an obligation to require learners to demonstrate that they have attained the learning outcomes.

The assessment procedure, its timing, and its application are part of the planning process. Assessments actively involve the learners and provide them a basis for refining their knowledge and skills. Assessments should be used throughout an activity, course, or program as instructional strategies to help keep learners actively involved, reinforce learning, monitor learner progress, and to provide feedback. They may also be made at the conclusion of the activity, course, or program, or after some elapsed time following the learning experience.

Because the assessment method depends on the intended learning outcomes, they must be measurable or observable, clearly stated, and focused on the performance of the learner. Assessment of learning outcomes should be a part of an activity, course, or program and the methods of the assessment procedure should be made known to the learners in advance (e.g., examinations, quizzes, questionnaires, etc.).

11. Requirements for Satisfactory Completion

It is the responsibility of the ASPE Chapter to assure those satisfactory completion requirements, based on purpose and learning outcomes, are established for each activity, course, or program.

Guidelines

Satisfactory completion requirements are established prior to the beginning of the activity, course, or program.

Requirements for performance levels should be based on the intended learning outcomes. When learner attendance is part of the satisfactory completion, attendance requirements should be high and documented on rosters, sign-in sheets, or other methods for tracking attendance.

Learners should be informed of requirements prior to their participation in the learning activity, course, or program. Learners should be informed that only those who meet those requirements will earn CEUs.

12. Post-Activity, Course, or Program Evaluation

The ASPE Chapter should be sure that each learning activity, course, or program is evaluated.

Guidelines

Program evaluation is a measurement of the quality, or determination of the worth of the activity, course, or program as a whole. Evaluation is a coordinated process that examines all parts of the activity, course, or program planning and delivery process. It consists of gathering data based on established criteria and observable evidence. The Chapter should assure that the established evaluation process examines the various educational activity aspects such as the needs assessment, logistical and instructional planning and execution, and the selection and preparation of instructors.

Any surveys utilized as a part of the activity, course, or program evaluation should be designed to capture specific information that will allow the Chapter to make continuous improvements in their offerings.

Calculating the CEU

CEU

One (1.0) CEU = ten (10) contact hours of participation in organized continuing education experience under responsible, qualified direction and instruction.

Contact Hour

Contact hour = one clock hour of interaction between learner and instructor.

Contact implies a connection between a learner and a learning source. For the purposes of CEUs, that connection is two-way. The instructor or learning source must monitor the learner's progress and/or provide some form of feedback to the learner.

The 60—minute hour is the current standard for awarding CEUs.

The 50—minute hour is commonly used in a number of professions and by state licensing boards; however, 50 minutes was not intended to be the standard for a CEU contact hour of instruction.

No credit may be counted for the ten-minute differential between the 50 and 60—minute hour. The 10—minute increments may not be accumulated to form additional contact hours. Example: Using the 60—minute hour, an activity, course, or program from 9:00 AM until 12 Noon would be counted as three (3) contact hours for CEU calculation. Using the 50-minute hour would also result in the same three (3) contact hours calculation, since the 10 extra minutes in each of the three (3) hours cannot be totaled as 3 and one-half contact hours for CEU calculation.

Calculating the Number of CEUs

1. Determine the number of contact hours.
2. Divide the number of contact hours by 10. The result will be the number of CEUs.
3. CEUs are usually expressed in tenths of a CEU (i.e., 17 contact hours equate to 1.7 CEU; 3 contact hours equate to 0.3 CEU).
4. Providers may use hundredths to express a one—half hour increment. For example, a course of three and one-half hours may be expressed as 0.35 CEU. Hundredths are not to be used to express any portion of an hour other than a half-hour.
5. When the fractional part of an hour is at least $\frac{5}{6}$ (50 minutes or more), the fractional portion should be counted as a whole hour. Any portion of an hour between 30 and 49 minutes should be counted as 30 minutes. Any part of an hour less than 30 minutes should be discarded.

What Activities Can Earn CEUs?

The following learning activities are examples of types of activities to include when calculating contact hours for CEUs:

- ☒ Classroom or meeting session time led by instructor and/or discussion leader.
- ☒ Activities in which a learner is engaged in a planned activity, course, or program of learning in which the learner's progress is monitored and the learner receives feedback. Examples include independent study, computer-assisted instruction, interactive video, web site learning, and planned projects.
- ☒ Field trips, projects, and assignments which are an integral part of a activity, course, or program.

What Activities and Experiences Cannot Be Counted For CEUs?

Although unplanned, unsupervised and non-sponsored educational and training activities can produce positive learning experiences and are occasionally recognized by some professions and licensing boards, they do not meet the overall criteria for issuing CEUs. [However, they may be quantified with units of measurement other than the CEU; for example, Recertification Education Units (REUs) for the ASPE CIPE recertification process.]

The following activities should not receive CEUs:

- ☒ Academic credit courses: CEUs may be awarded for academic credit courses which meet the CEU criteria; however, individual participants should not receive both CEU and academic credit.
- ☒ Association membership and leadership activities: Holding membership or serving in some leadership capacity in an association or society does not qualify for CEUs.
- ☒ Committee meetings: Participation in committee meetings and activities do not qualify for CEUs.
- ☒ Entertainment and recreation: CEUs may not be awarded for attendance at cultural performances, entertainment, or recreational activities unless they are an integral part of a planned course which meets the CEU criteria.
- ☒ Individual scholarship: CEUs may not be awarded for independent writings such as articles, books, research reports, or presentation of papers outside of a planned, directly supervised continuing education experience that fulfills the CEU criteria.
- ☒ Mass media activities, courses, or programs: Activities, courses, or programs delivered through the mass media (e.g., television, radio, newspaper) do not qualify for CEUs, unless these presentations are an integral part of a planned activity, course, or program which meets the CEU criteria.

- ¥ Some meetings, conventions, exhibitions: Meetings, conventions, and exhibitions which attract large numbers of participants, involve different activities, and are conducted primarily for information sharing purposes generally do not qualify for CEUs. Planned learning activities within such events which meet the criteria are eligible for CEU.
- ¥ Travel: Travel or participation in a travel-study program does not qualify for CEUs, unless the educational component of travel-study program meets the CEU criteria.
- ¥ Unsupervised study: Individual, self-directed study or other form of independent learning experience which is not planned, directed, and supervised by a provider does not qualify for CEUs.
- ¥ Work experience: On—the—job training and other work experiences do not qualify for CEUs unless the work experience is structured as part of a planned and supervised continuing education experience that meets the criteria. CEUs are not to be awarded for life or previous work experience.
- ¥ Youth programs: CEUs are not to be awarded for participation in programs designed primarily for ages below adulthood.

CEUs should not be granted for an activity, course, or program that is less than one hour (50 to 60 minutes) in length. Sessions within an activity, course, or program may be of any length. An activity, course, or program of short duration, one or two hours, often do not warrant the degree of planning required by the criteria. Caution should be exercised with shorter length educational activities to ensure their adherence to the criteria.

Basic Terms and Definitions Related to the Issuing of CEUs

Activity: Event(s) planned to cause learning; often used synonymously with the term course to indicate planned learning experience(s); would include seminar.

Contact: Interaction between a learner and instructor or between a learner and materials which have been prepared to cause learning. Contact implies two—way communication in order for the learner to receive feedback to monitor and assess learning.

Contact hour: One clock hour of interaction. A clock hour may be 60 or 50 minutes.

Continuing education and/or training: Structured educational and/or training experiences for personal or professional development in which participants are assumed to have previously attained a basic level of education, training, or experience.

Continuing education unit: Ten (10) contact hours of participation in an organized continuing education experience under responsible providership, capable direction, and qualified instruction.

Course: A defined curriculum usually dealing with one issue or subject related to engineering, that has a beginning and ending time. A course may be taught in different time frames such as one hour, one day, one week, one month, or over a period of days, weeks, or months.

Criteria: Standards, requirements, or rules that define acceptable practices.

Demonstration: An activity in which participants provide evidence that they have learned what was intended in the stated learning outcome(s).

Delivery formats: Methods used to deliver instruction, including, but not limited to, on—site workshops, computer-based instruction, video-conferences, self-paced workshops via Internet, audio tapes, video tapes.

Education: A process for acquiring knowledge whereby individuals learn to think and reason beyond the level of application.

Evaluation: A process for measuring discrete elements or the overall success of courses including such elements as learner satisfaction, benefits, results or outcomes, learning achievement, and impact.

Instructional methods: Methods used by an instructor to cause learning to occur. Examples include, but are not limited to, lectures, questions, discussions, visuals, exercises, summaries, case studies, training manuals, reference materials, handouts, electronic simulation, demonstrations, practical hands—on exercises, and virtual reality sessions.

Learner: An individual participating in an activity for the purpose of acquiring knowledge, skills, or attitudes.

Learning need: The gap between a learner s current level and some desired level of knowledge, skills, attitudes, or performance, generally stated as a problem or issue.

Learning outcomes: Statements which define the solution to the problem or an issue identified in the assessment of learning needs. Each outcome statement explicitly lists what learners will know and/or be able to do as a result of a course. Outcome statements are expressed in measurable and observable terms such as: Participants will demonstrate the five key rules for using CAD systems.

Needs assessment: An organized and planned process for identifying learning needs; a process that identifies the gaps between a learner's current level and some desired level of knowledge, skills, attitudes, or performance.

Permanent record: A record of an individual's continuing education participation which is maintained by a Chapter. Frequently referred to as a learner record or transcript, the Chapter must provide a copy of the individual's record upon request of the individual.

Program: An umbrella term covering a series of activities or courses.

Satisfactory completion: Having met the Chapter's established requirements for completion of an activity, course, or program.

Summative evaluation: Evaluation conducted at the end of an activity, course, or program to determine its effectiveness and worth.

Training: Planned learning experience(s) in which individuals learn to perform a specific skill; generally interpreted as being more narrowly focused than the term education.

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