



## **ARELLO<sup>®</sup> EXAMINATION ACCREDITATION PROGRAM GUIDELINES FOR ACCREDITATION<sup>©</sup>**

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### **INTRODUCTION**

In accordance with *ARELLO<sup>®</sup> Examination Accreditation Program Procedures* these *Guidelines for Accreditation* (Guidelines) have been adopted by the ARELLO Examination Accreditation Committee (Committee) for use in evaluating submissions for accreditation or reaccreditation of examination programs by ARELLO<sup>®</sup>

The *ARELLO<sup>®</sup> Examination Accreditation Program Procedures* contain the policy, process, criteria and procedure concerning the accreditation of licensing examination programs. Applicants are referred to the Procedures for the basic requirements for accreditation. Applicants shall fully comply with the Procedure requirements, and the applicant's examination development program must be found by the Committee to be in compliance with these Guidelines.

Accreditation may be issued either: (1) without imposition of criteria or suggestions, or (2) with criteria that must be satisfied within a specified period of time, and/or (3) with suggestions for examination development program improvement.

### **GENERAL GUIDELINES**

#### **1. Examination Eligibility**

See the Program Procedures for a description of the "multi-jurisdiction general" examinations and "single-jurisdiction general" examinations that are eligible for accreditation under this program.

#### **2. Applicability of GUIDELINES**

These Guidelines are applicable in their entirety to submitted examinations without regard to the method(s) of examination administration the applicant uses.

#### **3. Applications**

In addition to completing the prescribed application form in accordance with the "Application Instructions," and submitting the appropriate fees, applicants seeking accreditation shall provide a narrative, supported by appropriate reference materials (specifications, policies, guidelines, reports, records, samples, etc.), that separately addresses each of the Specific Guidelines that follow. If an applicant's examinations do not fully comply with one or more of the Specific Guidelines, the applicant shall provide for each Specific Guideline in question, an explanation of why its examinations do not comply and what, if any, steps are planned to bring its examinations into compliance with such Guideline.

## SPECIFIC GUIDELINES

### 1. Examination Specifications

Examinations shall be based on and consistent with adequate content, statistical and editorial specifications.

- a. Examination CONTENT Specifications:** Examination content specifications shall clearly define the knowledge and skills necessary to ensure that a candidate who has the defined knowledge and skills is competent to practice in a manner that protects the public interest.
- i. Examination content shall be defined in sufficient detail to ensure comprehensive and consistent coverage of specific topics on various examination forms.
  - ii. The weighting of various topics in the specifications shall be reasonably consistent with the relative importance of knowledge of such topics for competent performance.
  - iii. The level of knowledge or skill required in relation to each specific topic shall also be specified either in the content specifications or in other materials guiding examination development.
  - iv. Content specifications (and, if defined separately, the required cognitive levels for examination topics) shall be based on an appropriate job or task analysis that provides evidence of the content validity of the examinations. The degree to which an examination may contain topics and items in common with an examination for a different purpose (e.g., a different type of level of license) shall be addressed specifically in the job/task analysis and development of examination specifications. The job analysis may be accomplished either by use of a survey of a representative sampling of practitioners or by use of a committee of knowledgeable practitioners that is representative of the industry, by use of a combination of both methods, or by some other rigorous method acceptable in education and psychology.
- b. Examination STATISTICAL Specifications:** Statistical specifications shall include:
- i. The number of items,
  - ii. The intended difficulty level of the test overall,
  - iii. The intended range and distribution of item difficulties,
  - iv. The target value(s) for item discrimination indices,
  - v. What score(s)/subscore(s) will be reported:
    1. the scale on which the score(s) will be reported,
    2. precise specifications for determining the score(s), target ranges for estimates of internal consistency reliability for each score/subscore to be used for making a pass/fail decision,
    3. the target range for estimates of classification consistency or reliability of the pass/fail decision, and

4. any specifications for use of particular items and/or item placement required by a plan to ensure equivalence of various forms of the examination.
  5. specifications shall define examination development procedures and criteria which help ensure that a given score represents the same level of performance across examination forms and administrations.
  - vi either statistics and statistical specifications unique to each format/medium/mode shall be used or comparability of the statistics used to develop the examinations and/or report the scores shall be demonstrated if examinations are to be administered in more than one format or using more than one medium or mode,
  - vii. values of estimates generally deemed acceptable for licensure examinations.
  - viii. sufficient evidence to conclude that the assumptions of statistical models employed in the development and analysis of the examinations are tenable (e.g., sufficient sample sizes upon which to base estimates of model parameters).
- c. **Examination EDITORIAL Specifications:** Editorial specifications should include reasonable requirements for item types to be used, clarity and consistency of items, general presentation of items and directions, and specific format considerations, such as minimum font sizes, color, layout, and accessibility of text and graphics in the examination forms.

Note: The examination specifications described above need not be addressed in a single document. It is sufficient for the required components of the specifications to be addressed in various written policy documents relating to the examination.

## 2. **Item Writing and Review**

- a. Each person utilized as an item writer or as a reviewer of the substantive content of items shall be a subject-matter expert (SME) with demonstrated expertise in the examination content area for which the person writes or reviews items and with other qualifications necessary to support the content validity and measurement precision of the examinations. A SME must be a person who, based on education and experience, would be generally regarded as having comprehensive, detailed, accurate knowledge of the subject matter for which (s)he will write or review items. SMEs utilized for item review should collectively be balanced to ensure adequate use of different types of real estate SMEs (i.e., brokers, educators, attorneys, regulators, appraisers, and others with significant real estate knowledge/expertise).  
Every effort should be made to select item writers and reviewers who will consider the diversity of the candidate and licensee population with respect to race, ethnic background, sex, disability, and age when developing items. Item writing and review assignments should be made to maximize the likelihood that the bank of items from which examinations are developed reflects diversity and is secure.
- b. Each item writer and reviewer shall be given detailed written guidelines specific to licensure examinations. These guidelines shall be thorough and shall include principles for preparing items that are consistent with ARELLO<sup>®</sup> Examination Accreditation Committee *Basic Item Writing Principles*, specifications for content and style, explanations of cognitive levels to be required for items, specific instructions for

considering the cultural background and prior experiences of various subgroups in the candidate population, and examples of items appropriate for licensure examinations.

- c. Procedures and methods for item writing and review must take into account the potential effects of setting/environment, scheduling/ time allotted, external influences, and availability of resources on the ability of item writers and reviewers to perform the research, analysis, and thoughtful contemplation required to produce secure, technically accurate, and sound items. Procedures must also provide for the use of an evaluation method and measure of item writing quality and review effectiveness to identify individuals who demonstrate expertise for writing or reviewing quality items.
- d. Measures must be taken to protect the confidentiality of examination items during the writing and review processes, including having each item writer and reviewer sign an affidavit to protect the security of the examinations by not releasing, in any form or to any individual not directly affiliated with the examination program, information about the items (s)he has written or seen. If the item writing or review is not conducted under the direct supervision of the jurisdiction or examination organization, the affidavit must also attest that the writer or reviewer will maintain the items in secure, locked storage when not in use.
- e. Each examination item shall be reviewed by both qualified subject matter experts and at least one person with expertise in test development. All reviewers shall be familiar with the specifications for and the purpose of the examination.

### **3. Item Tryouts**

Each item shall be administered to a sample of individuals representative of the candidate population before being used to contribute to a candidate's score on an examination. (This item tryout requirement may be addressed by conducting preliminary item analyses before scores are finalized and reported.) Item tryouts should provide information that can be used to ensure clarity of directions, adequate time for examinees to respond, and acceptable characteristics of the item. Any item that does not perform in a manner consistent with examination specifications may be revised, reviewed, and pilot tested as revised.

### **4. Item Banking**

- a. Each content area of an item bank shall be of sufficient size to support generation/assembly of different examination forms meeting all examination specifications, and the item bank shall have a sufficient number of items representing each aspect of the examination specifications (i.e., content areas, item formats, cognitive levels, statistical properties, etc.) to ensure that items are not used to such an extent that security is compromised. The number of items required for a content area will depend upon the number of candidates for whom the examinations are prepared and the proportion of examination coverage devoted to the content area.
- b. Each item shall be stored in the item bank exactly as it is intended to be used.
- c. Codes assigned an item shall ensure that all relevant characteristics of the item may be considered in the test generation/assembly process.

- d. A system shall be used to maintain a history of administrations of an item, including the tryout(s). This may be accomplished by retaining copies of operational forms in which items have been used or by maintaining records of the items composing each form. This applies even when each candidate receives a unique form of the examination.

**5. Item Performance Statistics**

- a. An appropriate statistical analysis of item performance shall be performed and reviewed by qualified individuals prior to issuing final scores for any examination form.
- b. A system shall be used to maintain statistics on item performance. For each item, these statistics shall be maintained for at least the 200 candidates who most recently took the item. Such statistics shall be considered in examination generation/assembly.
- c. The system for maintaining item performance history shall provide the ability to generate item performance statistics for each version of an item that is used. (A different version of an item is created by reordering answer choices, reformatting the item, changing punctuation, or other changes that do not result in changing any language content of an item. A different version or a different item may be created by changing the medium or mode in which the item is administered; unless the test developer provides evidence that examinee performance on an item will be comparable across different modes of item presentation, the item administered in one mode should be considered different from the item administered in another.)

**6. Examination Generation/Construction**

Each examination form shall be generated/constructed in a manner that reflects all aspects of the detailed content, statistical, and editorial specifications for the examination.

**7. Review/Revision of Examination Form**

- a. Each examination form shall be reviewed for content accuracy, content overlap/omission, adherence to examination editorial and statistical specifications, and adherence to item writing guidelines.
- b. The review and revision process shall ensure that the items are independent of one another, so that the answer to one item is not required to obtain the answer to another item, except as reflects requirements in entry-level practice (which may be accommodated in situational sets of items), and that no item provides a clue to any other item in the form.
- c. If examination forms are generated/constructed by computer, procedures for accomplishing these objectives shall be built into the system by which the examination forms are generated/constructed. A quality assurance review of at least one form of the examination in the exact format and mode in which it will be delivered shall be completed prior to examination administration in that format/mode. Any examination form or delivery system that does not conform shall be revised appropriately or discontinued.

**8. Examination Form Psychometric Characteristics**

- a. Before a final score is issued for any examination form, the psychometric characteristics of the form shall be estimated and reviewed. The analysis may be accomplished by imputation, and the review may be accomplished by computer software that has been tested and proven to be accurate. Examination statistics shall include estimates of internal consistency (e.g., coefficient alpha, Kuder-Richardson Formula 20); and if more than one score is used for making a pass/fail decision, such estimates of reliability shall be made for each such score. Estimates of the reliability of the pass/fail decision, or consistency of classification, shall also be computed or imputed and maintained.
- b. A system shall be used to estimate and monitor the psychometric characteristics of examination forms. These statistics should be computed for all administrations of an examination form, and a record should be maintained while such examination form is in use and for at least one year after use is discontinued. Such statistics should be considered when making decisions regarding reuse of an examination form. When each candidate receives a unique form of the examination, the examination form statistics may be retained with the record of the candidate's examination items or shall be capable of being generated for a period of at least one year following the candidate's examination.

**9. Examination Production**

- a. Routine, specified procedures shall be followed to ensure the quality of all examination products, regardless of the format (e.g., paper, electronic).
- b. Camera-ready copy, printed examination booklets, and electronic images shall be produced under conditions that provide for the utmost security of the examinations. If the jurisdiction or examination organization does not produce these under its direct supervision, the service provider shall follow precisely specified procedures for maintaining the security of the materials.
- c. Preparation of examination materials/equipment shall facilitate appropriate distribution or utilization of the materials/equipment in a manner that ensures examination security.

**10. Examination Delivery**

- a. Candidates shall be given the opportunity to become familiar with the examination delivery method or system, and, prior to beginning the examination, shall demonstrate familiarity with the mode sufficient to indicate responses to the examination items. This may be accomplished through release of practice items prior to test administration. For computer-administered examinations, if there is reason to believe that the practice delivery environment and mode will replicate that of the examination environment, this may be accomplished through advance delivery of practice items or examinations off-site. If not, it shall be accomplished in the actual examination environment on the platform through which the examination is delivered.



- b. If examinations are to be administered in more than one mode, all modes shall provide candidates with the same degree of control and feedback (e.g., item review, skip and return to an item, verification of answer selection or entry).

### **11. Passing Score**

The examination provider shall recommend a passing score derived using a method that is designed to be nationally representative and consistent with the *Standards for Educational and Psychological Testing*, the *Uniform Guidelines on Employee Selection Procedures*, the *Civil Rights Act of 1991*, and other regulations and standards applicable in the jurisdiction(s) in which the examination is to be used. When a jurisdiction does not adopt the recommended passing score, the examination provider shall advise that jurisdiction that the passing score is a critical element in examination validity and that arbitrary passing scores set merely by statute, rule, or policy are not defensible in the absence of a professionally acceptable study of the level of performance that should be required of entry-level practitioners.

### **12. Continuing Examination Development**

- a. A system shall be established for periodic review of item performance statistics and examination form statistics to identify potential problems with items/forms, to identify areas where items/forms can be improved, and to ensure that examinations are continuing to meet examination specifications.
- b. A system shall be established for periodic review and updating of items in the item bank to ensure that such items continue to be current and appropriate.

### **13. Data Maintenance and Retrieval**

- a. The jurisdiction or examination organization shall ensure that information about a candidate's examination performance is retrievable within reasonable time limits for a reasonable period of time. Before taking the examination, candidates shall be informed of rights and restrictions regarding review of the examination and examination results.
- b. If there is a legitimate reason to believe that a candidate's score is inaccurate, the jurisdiction or examination organization shall ensure that the responses are rescored and the accuracy of the result verified. The jurisdiction or examination organization shall provide for rescoring. Upon submission of a legitimate candidate request within a time period and for a fee, if any, specified in advance to the candidate.
- c. The jurisdiction or examination organization shall assure that identifiable information about a candidate's examination performance is used or released only (1) as required by law or (2) for purposes for which the individual has granted express permission or has been provided prior notice that the information will be released in a manner that assures the confidentiality of the individual.

### **14. Security**

- a. Appropriate procedures shall be designed and employed to ensure the security of examinations and related information at all times.

- b. In all phases of examination development, all copies of examination items and associated developmental materials, both paper and electronic, shall be stored securely so that they can be retrieved only by persons who have a legitimate reason to retrieve the materials and are so authorized by the jurisdiction or examination organization.
- c. The jurisdiction or examination organization shall assure that access to electronic, paper, or other forms of confidential data is reasonably limited to only those who must use the data.

## 15. Overall Examination Content

The COMMITTEE must find that the examination forms submitted to ARELLO® for review are, *in fact*, satisfactory in regard to overall content (topic coverage, topic weighing, cognitive level tested, item characteristics, conformity of items with ARELLO Examination Accreditation Program Basic Item Writing Principles, general presentation of items, and directions to candidates).

## 16. Accommodations and Modifications

The examination provider should make every attempt to develop and present examinations according to universal design principles, such that a minimum of changes are needed to accommodate the non-job-related test-taking needs of the greatest number of candidates. The provider should assist the jurisdiction to develop and implement accommodations necessary to help make the non-job-related demands of the examination equivalent for candidates with and without disabilities. This may require enlarging font sizes, providing control of presentation features (e.g., color, font, position), delivery in an individual setting, or other such accommodation that is unlikely to affect the interpretation of the candidate's score. However, translation into Braille, delivery via audiotape, or other adaptation or modification may have impact on the manner in which the examination result should be interpreted. The examination provider shall have a policy regarding accommodations, adaptations, and modifications and shall advise the examination user of the most likely effects of these accommodations or changes upon the interpretation of resulting scores.

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