

C-7 D. Discipline-Specific Knowledge

(Commission on Accreditation, November 2015; revised, July 2017)

Discipline-specific knowledge serves as a cornerstone of identity as a psychologist and orientation to health service psychology. Therefore, all students in accredited doctoral programs shall demonstrate knowledge in the discipline of psychology, broadly construed. This discipline-specific knowledge base shall include: 1) the history and systems of psychology, 2) basic knowledge in scientific psychology, 3) integrative knowledge in scientific psychology, and 4) methods of inquiry and research.

Discipline-specific knowledge, as it is articulated in the Standards of Accreditation (Doctoral Standards, II.B.1.a):

- a. *Discipline-specific knowledge represents the requisite core knowledge of psychology an individual must have to attain the profession-wide competencies. Programs may elect to demonstrate discipline-specific knowledge of students by:*
 - i. *Using student selection criteria that involve standardized assessments of a foundational knowledge base (e.g., GRE subject tests). In this case, the program must describe how the curriculum builds upon this foundational knowledge to enable students to demonstrate graduate level discipline-specific knowledge.*
 - ii. *Providing students with broad exposure to discipline-specific knowledge. In this case, the program is not required to demonstrate that students have specific foundational knowledge at entry, but must describe how the program's curriculum enables students to demonstrate graduate-level discipline-specific knowledge.*

For purposes of this Implementing Regulation, there are four categories of discipline-specific knowledge.

Category 1: History and Systems of Psychology

- **History and Systems of Psychology**, including the origins and development of major ideas in the discipline of psychology.

Category 2: Basic Content Areas in Scientific Psychology.

- **Affective Aspects of Behavior**, including topics such as affect, mood, and emotion. Psychopathology and mood disorders do not by themselves fulfill this category.
- **Biological Aspects of Behavior**, including multiple biological underpinnings of behavior, such as neural, physiological, anatomical, and genetic aspects of behavior. Although neuropsychological assessment and psychopharmacology can be included in this category, they do not, by themselves, fulfill this category.
- **Cognitive Aspects of Behavior**, including topics such as learning, memory, thought processes, and decision-making. Cognitive testing and cognitive therapy do not, by themselves, fulfill this category.
- **Developmental Aspects of Behavior**, including transitions, growth, and development across an individual's life. A coverage limited to one developmental period (e.g., infancy, childhood, adolescence, adulthood, or late life) is not sufficient.
- **Social Aspects of Behavior**, including topics such as group processes, attributions, discrimination, and attitudes. Individual and cultural diversity and group or family therapy do not, by themselves, fulfill this category.

Category 3: *Advanced Integrative Knowledge in Scientific Psychology.*

- **Advanced Integrative Knowledge of Basic Discipline-Specific Content Areas**, including graduate-level scientific knowledge that entails integration of multiple basic discipline-specific content areas identified in Category 2 (i.e., integration of at least two of: affective, biological, cognitive, social, or developmental aspects of behavior). Advanced integrative knowledge in Category 2 areas can be acquired in either of two ways: 1) an evaluated educational¹ experience that integrates at least two Category 2 content areas that have been previously covered through other methods; or 2) an evaluated educational experience that provides basic coverage in two or more areas and integration across those areas.

Category 4: *Research Methods, Statistical Analysis, and Psychometrics*

- **Research Methods**, including topics such as strengths, limitations, interpretation, and technical aspects of rigorous case study; correlational, experimental, and other quantitative research designs; measurement techniques; sampling; replication; theory testing; qualitative methods; mixed methods; meta-analysis; and quasi-experimentation.
- **Statistical Analysis**, including topics such as quantitative, mathematical modeling and analysis of psychological data, statistical description and inference, univariate and multivariate analysis, null-hypothesis testing and its alternatives, power, and estimation.
- **Psychometrics**, including topics such as theory and techniques of psychological measurement, scale and inventory construction, reliability, validity, evaluation of measurement quality, classical and contemporary measurement theory, and standardization.

Overarching considerations that apply to all aspects of DSK

Several aspects of this IR are intentionally written broadly in order to allow programs to design curricula that are consistent with their aims, the training needs of their students, and evolutions in the field. The narrative descriptions provided within the bullet points above for each of the discipline-specific content areas are *not* checklists of required topics; rather, they are *examples* of the sorts of topics that may be included. For example, under Category 4, all programs are expected to provide evaluated doctoral-level experience in research methods, statistical analysis, and psychometrics; however, different programs may elect to include customized topics within those broad headings.

Considerations specific to Category 1 (*History and Systems*)

The History and Systems requirement is the only portion of the DSK that may be accomplished entirely prior to matriculation into the doctoral program and/or through undergraduate-level work after matriculation into the doctoral program. Alternatively, programs may choose to cover this domain of knowledge at the graduate rather than the undergraduate level. Refer to the section below entitled *Foundational knowledge attained outside of the doctoral program* for information about evaluation of these types of educational experiences.

¹ **Evaluated educational experience:** a learning experience (e.g., course, parts of courses, or independent study) the outcome of which is assessed by a person recognized as having current knowledge and expertise in the area of the learning experience.

Considerations specific to Category 2 (*Basic Content Areas in Scientific Psychology*)

The SoA distinguishes between 1) *foundational knowledge of DSK*, which may be acquired prior to matriculation into the doctoral program, at the undergraduate level after entering the doctoral program, or through graduate-level training, and 2) *graduate-level knowledge of DSK*.

As required by the SoA, programs must demonstrate that students are provided with the opportunity to acquire and be evaluated on Category 2 discipline-specific knowledge at the graduate level. In evaluating whether a program has provided sufficient coverage of the DSK, the CoA will require documentation that, *at program completion*, each of its students has demonstrated sufficient knowledge *in each Category 2 area* to allow 1) *graduate-level* interaction with the scientific literature that draws on these categories and 2) an understanding of the scientific foundations of the Profession-Wide Competencies. Refer to the section below entitled *Graduate-Level Training* for information about how the curriculum will be evaluated by CoA to ensure sufficient graduate-level coverage.

It is understood that accredited programs will vary in the amount of foundational knowledge of the DSK that is expected at program entry; also, within a single program, students may have variable knowledge bases at program entry. For some programs, rigorous entry criteria will result in the need for less emphasis on *foundational* content within the doctoral program and more extensive coverage of graduate-level knowledge of DSK. By establishing foundational knowledge in this manner, trainees will demonstrate considerable depth of knowledge when the entirety of their educational records are considered, despite relatively less emphasis on foundational material during doctoral training. In contrast, for programs that admit students with less undergraduate education in foundational knowledge of the DSK, the entire curriculum (both foundational knowledge and graduate-level knowledge) may be taught during doctoral training.

It is not consistent with the SoA for the entirety of a student's education in the DSK to occur prior to matriculation into the doctoral program or through undergraduate coursework following matriculation into the doctoral program.

Coverage of graduate-level discipline-specific knowledge within an accredited program may be provided through coursework (e.g., individual courses or material infused across multiple courses) or through other evaluated educational experiences (e.g., research requirements, qualifying examinations, or other methods). Programs must provide a minimum of one integrative evaluated educational experience (Category 3: Advanced Integrative Knowledge), but it is permissible to achieve multiple required graduate-level competencies in DSK through one or more integrative experiences.

Regardless of the method by which a program chooses to satisfy the discipline-specific knowledge requirement, the program must document how *each* student demonstrates graduate-level knowledge in the relevant content areas. The program must also document procedures for ensuring the curriculum plan in these content areas is developed, provided, and evaluated by faculty who are well qualified in the content areas as specified in IR C-23D.

Evaluating graduate-level training

Graduate-level training must include evidence of graduate students' exposure to knowledge through a curricular experience that utilizes primary source materials (including original empirical work that represents the current state of the area), emphasizes critical thinking and communication at an advanced level, and facilitates integration of discipline-specific knowledge with the program's substantive area(s) of practice.

As programs work to confirm that their graduate-level training and evaluation is sufficient to meet these criteria, they are advised to ensure that students are interacting with current primary source materials and that they are evaluated in part on their ability to communicate critical thinking at an advanced level.

Evaluating foundational knowledge attained outside of the doctoral program

Programs that permit the attainment of foundational Category 1 and/or Category 2 knowledge through experiences that were not acquired within the accredited program bear a significant responsibility for documenting the quality/rigor, currency, standardization, and fairness of the method for establishing students' knowledge.

If programs permit students to attain foundational knowledge of Category 1 or 2 areas of DSK outside of their doctoral training (i.e., prior to matriculation or through undergraduate coursework they may enroll in while they are also doctoral students), it is incumbent upon programs to develop and implement systematic processes to evaluate *each individual student's foundational knowledge*. The CoA will assess the extent to which these systematic processes are:

- Relevant to the required discipline-specific knowledge areas (i.e., history and systems; affective, biological, cognitive, social, or developmental aspects of behavior).
- Sufficiently rigorous to demonstrate students' substantial understanding of discipline-specific knowledge.
- Appropriate for the program's intended use.
- Free from discrimination on bases irrelevant to success in the doctoral program.
- Based on a substantial educational experience that included evaluation of knowledge contemporaneous with the experience (e.g., a course for which the instructor assigned a grad at course completion, rather than an activity completed in the remote past that was evaluated post hoc by a member of the doctoral faculty).

The SoA lists the GRE subject test as an example of a standardized test; however, the CoA does not mean to imply that this is the only or the preferred method of evaluation. The Major Field Test or other standardized evaluations of knowledge in scientific psychology may also be appropriate, as may evaluations developed at the program level (e.g., tests of knowledge at program entry designed by the doctoral program). In addition, there are several instances in which the GRE subject test may not be an appropriate evaluation method for a program (e.g., if it does not evaluate the required areas of knowledge, is not considered appropriate for the program's use, or discriminates against specific applicants on bases irrelevant to success in the program). The CoA anticipates that assessment methods will evolve as demand for them increases.

At times a program may determine that its evaluation methods or minimum criteria could inadvertently discriminate against an individual student on the basis of issues irrelevant to success in the doctoral program. In this case, the program should utilize alternative methods and corresponding criteria and document this determination process and the specific criteria used.

Considerations specific to Category 3 (*Advanced Integrative Knowledge in Scientific Psychology*)

The Advanced Integrative Knowledge category must be achieved entirely at the graduate level.

Considerations specific to Category 4 (*Research Methods, Statistical Analysis, and Psychometrics*)

The Research Methods, Statistical Analysis, and Psychometrics category of DSK must be achieved entirely at the graduate level. It is not required that coverage of Statistical Analysis or Psychometrics include original source materials.