

## Appendix C School Codes for the Exchange of Data (SCED)

### **Elements of the Coding Structure**

The SCED framework consists of four basic elements. Taken together, they create a unique identification code for any secondary course. The four component elements are course description, course level, available credit, and sequence.

**Element 1. Course Description** consists of two parts, a Subject Area and a Course Identifier within that Subject Area. For example, the course General Math is coded as 02002—Subject Area Mathematics (02) and Course Identifier (002).

*Subject Area.* These are 22 general content categories, each represented by a two-digit code. The categories are mutually exclusive and, to date, can include any course offered in secondary schools. The Subject Areas are listed in an exhibit at the beginning of chapter 3, Course Codes and Descriptions. Subject Area identifies a single course when it is combined with the Course Identifier.

*Course Identifier.* Courses within a Subject Area are distinguished by a three-digit code. The codes carry no meaning within themselves. As with all entries in the NCES Handbook series, “999” is reserved for courses coded as “other.” Only some numbers between 001 and 999 have been used in this system; unused numbers can accommodate new courses as these are added to the SCED.

The Course Descriptions are fairly general. They provide enough specificity to identify the course’s topic and to distinguish it from other courses in that Subject Area. However, the Course Descriptions do not include course objectives.

Three other elements in the SCED structure provide additional information about a course when combined with the Course Description.

**Element 2. Course Level** conveys the course’s level of rigor. There are four options for coding this element:

- *B* for basic or remedial. A course focusing primarily on skills development, including literacy in language, mathematics, and the physical and social sciences. These courses are typically less rigorous than standard courses and may be intended to prepare a student for a general course.
- *G* for general or regular. A course providing instruction in a given subject area that focuses primarily on general concepts appropriate for the grade level. General courses typically meet the state’s or district’s expectations of scope and difficulty for mastery of the content.

- *E* for enriched or advanced. A course that augments the content and/or rigor of a general course, but does not carry an honors designation.
- *H* for honors. An advanced level course designed for students who have earned honors status according to educational requirements. These courses typically include additional content not found in general courses, and are formally designated as honors courses.

The majority of courses that schools offer are general: intended for any student in the proper grade level range. However, some courses are distinguished by having more or less rigorous requirements than the “usual” course and are designated as advanced/enriched, honors, or basic/remedial. Some school systems place students in, or allow students to select from, different “tracks”—particularly in academic 8 subject areas—while others do not use such distinctions, holding all students to the same standards. The coding structure enables schools to portray such differences.

Personal judgment is needed in assigning and interpreting the Course Level element. While individual schools, districts, and states may have criteria that clearly distinguish one level of course from another, these criteria are not the same in every state or school district. And, not every course catalog will include courses at all of these four levels.

**Element 3. Available Credit** identifies the amount of Carnegie unit credit available to a student who successfully meets the objectives of the course. A course meeting every day for one period of the school day over the span of a school year offers one Carnegie unit. A Carnegie unit is thus a measure of “seat time” rather than a measure of attainment of the course objectives. While some schools and districts use a performance—or competency—based metric of student progress, the Carnegie unit remains the predominant metric of student progress in schools in the United States and is part of the SCED framework.

Available Credit is coded as a one-digit number carried out to two decimal places, with an explicit decimal. That is, one Carnegie unit would be coded as 1.00. A half-unit of Carnegie credit would be reported as 0.50. Note that Available Credit for a given course can vary from school district to school district.

**Element 4. Sequence** describes the manner in which school systems may “break up” increasingly difficult or more complex information. School districts operating on a semester or trimester schedule frequently offer consecutive courses fitting one course description. For example, Accounting may be broken into two different courses that together make up a complete Accounting course. Or, the requirements for studio arts could include Creative Arts—Comprehensive (SCED #05154) and two additional studio arts courses selected from a number of choices (drawing, ceramics, sculpture, painting, etc.)

Sequence is a two-character element that should be interpreted as “part ‘n’ of ‘m’ parts.” In the example given above, if each course were a year in length, Creative Arts—Comprehensive would be course “one of three,” or “1 3.” It is important to

remember that sequence describes only the order in which the courses are taken. If the arts sequence in this example required six semester-long courses, the second semester of the introductory Creative Arts—Comprehensive could be shown with the sequence “2 6,” or, “part 2 of 6 parts.” The Sequence indicated for a given course can vary from school district to school district.

Exhibit 1 is an example of how the four SCED elements are used to identify a specific course, and the Level, Credit and Sequence that can differ for the same course.

**Exhibit 1. Course code structure: United States Government—Comprehensive**

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course description		course level	available credit	sequence
04	151	<b>H</b>	1.00	1 1
Social Sciences and History	U.S. Government —Comprehensive	Honors	one Carnegie unit	“1 of 1”—not part of a sequence
course description		course level	available credit	sequence
04	151	<b>R</b>	0.50	1 2
Social Sciences and History	U.S. Government —Comprehensive	Regular	one-half Carnegie unit	“1 of 2”—1st part of a 2-course sequence

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**Additional Notes on the Content and Structure of SCED**

*Course description codes.* SCED is intended to be an electronic system, part of the NCES *Handbooks Online*. Because of this, Subject Areas can be numbered in an arbitrary order (e.g., “01” is English Language and Literature, “02” is Mathematics, and so on). The Course Identifier codes within the various Subject Areas similarly carry no meaning other than that they distinguish one course from another. Unused numbers among the Course Identifiers are simply placeholders for additional courses that may be added to SCED and *Handbooks Online* in the future.

One important characteristic of an electronic data handbook is that, if there are good search criteria, it is just as efficient to include many entries as it is to include a few. A number of the courses in SCED will be offered by only a few districts; however, when a code and description are needed, they will be available.

*Ambiguous Subject Area descriptions.* Some courses combine content from more than a single subject area, and the assignment of the course to a Subject Area is a judgment call. When SCED is integrated into *Handbooks Online*, users can create their own course lists

and assign individual courses to whatever Subject Area is appropriate for that list while retaining the original SCED code.

*Additional transcript information.* SCED makes it feasible to include detailed course information on electronic student transcripts, with standard course descriptions that are widely understood. However, there will undoubtedly be additional information about courses and their outcomes that schools and districts will want to add to an electronic transcript or other student record. This could include, for example, grade assigned for performance in the class or flags identifying courses that meet State high school graduation or college admission requirements.

*Treatment of special education courses.* There are no course descriptions in SCED that are intended solely for students with disabilities, or that indicate that a course has been modified for these students. When this information is appropriate, users will need to add an element in order to note that a course is adapted to meet the individual needs stated in a student's Individual Education Programs (IEP).

*Treatment of AP and IB courses.* Advanced Placement (AP) and International Baccalaureate (IB) courses are assigned individual codes in SCED, rather than being identified by the Level element. This is because the College Board and International Baccalaureate Organization define the content and set the performance standards for AP and IB courses. Unlike "honors" or "advanced" classifications, a course's designation as IB or AP is not at the discretion of the school or district using SCED.

*Treatment of foreign language courses.* Obviously, SCED does not include every language other than English that could be taught in secondary schools. The languages for which there are course descriptions were those most likely to be found in the high school course catalogs reviewed for the development of SCED. For each language, there are five course descriptions that progress from introductory to higher levels of fluency; separate course descriptions for native speakers, field experience, study of conversation and culture, and the language's literature; and two courses preparing the student for the IB level A and level B examinations, respectively.

*Miscellaneous subject area.* This set includes courses that can not be assigned to any of the other subject areas. Miscellaneous courses often include activities or skills that are applicable to a range of topics: standardized test preparation (22001) or study hall (22006) are examples of this. Other miscellaneous courses, such as family living (22208) or community service (22104) address what may be perceived as important but nonacademic areas.