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

Elements of the Coding Structure
The prior-to-secondary course code and the secondary course code frameworks consist of four basic elements. Taken together, these elements create a unique identification code for any course. The four component elements are course description, course level, available credit (for secondary) or grade span (for prior-to-secondary), and sequence.

Element 1. Course Description consists of two parts, a Subject Area and a Course Identifier within that Subject Area. For example, the prior-to-secondary course General Math is coded as 52002—Subject Area Mathematics (52) and Course Identifier (002). Similarly, the secondary course General Math is coded as 02002—Subject Area Mathematics (02) and Course Identifier (002).

Subject Area. There are 23 Subject Area codes for prior-to-secondary-level courses and 22 for secondary courses, each represented by two digits. The option set for the prior-to-secondary Subject Area element (51 through 73) is derived by adding 50 to the secondary Subject Area code (i.e., the option set for the secondary Subject Area codes is 01 through 22). Subject Area identifies a single type of course, generally described, when it is combined with the Course Identifier; the Sequence field (Element 4, described below) may need to be used to describe a single course. The categories are mutually exclusive and, to date, can include any course offered in prior-to-secondary or secondary schools. The Nonsubject Specific Subject Area option (73) is used only at the prior-to-secondary level. The Military Science code (59) is not used at the prior-to-secondary level.

Course Identifier. Courses within a Subject Area are distinguished by a three-digit code. The codes carry no meaning within themselves. Generally, throughout the NCES Handbook series, “09999” is reserved for courses coded as “other.” In this handbook, however, “099” is used for “other.” Only some numbers between 001 and 999 have been used in this system; unused numbers can accommodate new courses as they are added to the Prior-to-Secondary or Secondary SCED. The Course Descriptions are fairly general, but 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 course classification 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 five 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—a course carrying an honors status according to educational requirements. These courses typically include additional content and/or a higher level of rigor than that found in general courses, and they are formally designated as honors courses.
- *X* for no specified level of rigor. The notion of rigor may not be appropriate for some courses at the elementary and middle levels; survey or interest courses that expose students to a variety of subjects are examples.
The majority of courses that schools offer are general; they are intended for any student in the proper grade-level range. However, some courses are distinguished by having more or less rigorous requirements than the “regular” course and are designated as enriched/advanced, honors, or basic/remedial. In some school systems, students are in different “tracks”—particularly in academic subject areas—while other school systems 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 rigor from another, these criteria are not the same in every state or school district. Not every course catalog will include courses at all of these levels.

**Element 3. Grade Span or Available Credit** identifies the intended grade span for a prior-to-secondary course. For secondary courses, this element indicates the amount of Carnegie unit credit available to a student who successfully meets the objectives for courses that carry credit. Grade Span, however, is used at the prior-to-secondary level, particularly in elementary and middle schools, where Carnegie units hold no particular meaning.

For prior-to-secondary courses, this element indicates the grade span for which the course is appropriate. The span is represented as a four-character code with no decimals. Each grade level from 1 through 12 is represented by a two-digit code, ranging from 01 to 12; kindergarten is represented by the letters KG, and prekindergarten by the letters PK. For example, a course appropriate for kindergarten and first grade would be assigned a Grade Span of KG01.

A secondary 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 content. School districts operating on a semester or trimester schedule frequently offer consecutive courses fitting into one Course Description. For example, Chemistry may be broken into two different courses that, together, make up a complete Chemistry course. Or a school may offer Chemistry 1 and Chemistry 2. Having this Sequence code allows for successively complex courses that cover the same general content to be coded, without having a system with thousands of codes that, in the end, may not translate across school, district, or state lines. (That is, Art 2 may be School A’s second semester Art class, while in School B, Art 2 may be the second year of Art.)

Sequence is a two-character element that should be interpreted as “part n of m parts.” In the School B example given above, with each course a year in duration, Creative Art–Comprehensive would be course “one of two” or “1 2.” It is important to remember that Sequence describes the order in which the courses are taken. If the arts sequence required or offered six semester-long courses, the second semester of Creative Art–Comprehensive could be shown with Sequence “2 6” meaning “part 2 of 6 parts.” The Sequence indicated for a given course can vary across school districts.

Exhibit 1 provides examples of how the four SCED elements are used to identify a specific prior to secondary or secondary course.
Exhibit 1. Course code structure: Life and Physical Sciences (Prior-to-secondary)

<table>
<thead>
<tr>
<th>course description</th>
<th>course level</th>
<th>grade span</th>
<th>sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life and Physical Sciences Biology General</td>
<td>grades 7 and 8</td>
<td>“1 of 1”—not part of a sequence</td>
<td></td>
</tr>
<tr>
<td>03 051 E</td>
<td>1.00</td>
<td>One Carnegie Unit</td>
<td>“1 of 2”—part of a sequence</td>
</tr>
</tbody>
</table>

Additional Notes on the Content and Structure of SCED

Course description codes. Within the SCED, Subject Areas are numbered in an arbitrary order (e.g., “51” is English Language and Literature, “52” 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. Integration of SCED into Handbooks Online enables users to 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, the grade assigned for performance in the class or, at the secondary level, 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 Program (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. SCED does not include every language other than English that
could be taught in school. The languages for which there are course descriptions are those most likely to
be found in the elementary, middle school, and secondary 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. Courses that cannot be assigned to any of the other subject areas are
designated as courses with a miscellaneous subject area. Miscellaneous courses often include activities or
skills that are applicable to a range of topics: standardized test preparation (72001 and 22001, for prior to
secondary course and secondary course, respectively) and study hall (72006 and 22006) are examples of
this. Other miscellaneous courses, such as community service (72104 and 22104) and family living
(72208 and 22208), address what may be perceived as important but nonacademic areas.