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ABSTRACT

This document, a byproduct of the National Longitudinal Study of the High School Class of 1972, provides data on what postsecondary courses are actually taken both by school completers and school leavers, based on analysis of postsecondary transcripts from 1972 to 1984 of 12,600 students graduating from high school in 1972. Also presented is a revised Classification of Instructional Programs (CIP) coding system based on recoding the 485,000 instances of course-taking in the sample. The tentative new taxonomy and decision rules were reviewed by faculties in the appropriate fields prior to final application. Data from the study are presented in tabular form and include the following: percentage of students completing undergraduate courses in 1,037 course categories; percentage of students completing undergraduate courses in 103 aggregate course categories; and distribution of all completed courses by type of institution. Additional data presented cover: basic demography and high school backgrounds of students; highest degree earned; college scholarship support; basic demography of 2/4-year and transfer attendance patterns; date of bachelor's degrees; date of associate's degrees; course of study and degrees earned beyond the bachelor's; and college experiences/attainments. (DB)

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A College Course Map

Taxonomy and Transcript Data

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A College Course Map

Taxonomy and Transcript Data

**Based on the Postsecondary Records, 1972-1984,
of the High School Class of 1972**

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Making the Map: Principles and Process

What, specifically, do we study after high school? What knowledge is the Nation acquiring in colleges, community colleges, trade schools, and other postsecondary institutions? Answers to these basic questions are important in assessing the quality of our workforce and cultural life. Answers to these questions are important in advising individuals on how to prepare for the challenges of adulthood, for helping state higher education agencies monitor educational services to different populations, and for guiding the Nation in preparing for economic, political, and social challenges of the coming century.

The most accessible answers to these questions, unfortunately, are both too general to be very useful and too narrow in their sources. That is, the computers whirring with national data can answer the questions only with reference to degrees and credentials actually awarded and only in terms of the dominant field, or "major" of those credentials. We can easily provide information on how many Associate's degrees were awarded in Nursing or how many Bachelor's degrees in Accounting or how many Doctoral degrees in History. Such information is helpful but limited. It doesn't tell us, for example, how much science the Nurses studied or what kind of science it was, hence how well Nursing graduates are prepared to adapt to changes in biomedicine.

Nor does it tell us about all those students--40% of those who continue their education after high school--who never earn a formal credential. What did they study? And how much? After all, they also enter the workforce and community life, and bring with them whatever knowledge they have acquired in postsecondary education. Did a large proportion of them study business subjects, for example? If so, what kind of business--accounting, marketing, finance, personnel? If we know the answers, we can judge better the resident knowledge in different sectors of our economy. And if national policy is designed to encourage people to complete degrees and credentials, knowledge of the curriculum pursued by non-completers is necessary for analysis and guidance.

To answer these questions requires detailed empirical data on the courses actually studied by students after high school. Those data are available only from transcripts generated by students as they pass through colleges, community colleges, trade schools, etc. Fortunately, there are a few national samples of postsecondary transcripts in existence that provide such detailed data. But the variety of course titles, departments of instruction, and allied data (credits, terms, grades) on those transcripts is infinite. Without a map of curriculum, without a system to describe those courses economically and with consistency, it is very difficult to negotiate the terrain and answer the questions.

The intent of this volume is to provide just such a map, and to demonstrate the data it can yield.

Origins of this Volume

The initial purpose of this project was to arrive at a credible and empirically viable taxonomy of course categories with which to analyze the college transcripts of 12,600 students in the Postsecondary Education Transcript Sample (PETS) of the National Longitudinal Study of the High School Class of 1972. The NLS/PETS is the oldest, largest, and most extensive (12 years of coverage) of all college transcript samples; and the NLS/72, as a whole, is the richest archive ever assembled on a generation of Americans, tracking them from high school through age 32. An accurate and detailed postsecondary transcript collection was necessary for staff in the Office of Educational Research and Improvement (OERI) to engage in a series of analyses on the nature and effects of postsecondary education in the life of this generation. These analyses will be published as a collection, Archives of a Generation, in the fall of 1990.

This reference volume is a by-product of those efforts. Our "radar screen" indicated that hundreds of colleges, community colleges, and universities were engaging in serious efforts to track the changing curricular experiences of their students. In the process, they were paradoxically using idiosyncratic taxonomies while wondering how their students' experiences compared to those of students at other institutions. What we offer here is an inductive taxonomy of postsecondary curricula based on the actual course-taking of a generation, a taxonomy that institutions may use and modify in their attempts to understand the nature and effects of the student experience of curriculum.

A Word About the NLS/72

The NLS/72 began with a sample of 22,600 students in their senior year of high school. The archive consists of high school records, test scores, five surveys (1972, 1974, 1976, 1979, and 1986), and the Postsecondary Transcript Sample (1984). The extraordinary loyalty of the anonymous participants in this longitudinal study may be indexed by the fact that in 1986, some 14 years after graduating from high school, 12,800 of them (88% of those asked) filled out a 65-page questionnaire covering virtually every aspect of their lives between age 25 and 32.

In 1979 (the 4th Follow-Up Survey), roughly 14,750 of the original 22,600 students claimed to have attended one or more postsecondary institutions since graduating from high school, and subsequently granted OERI permission to obtain their transcripts. One or more valid transcripts were gathered in 1984 for 85% of this group. Much of the 15% difference can be easily accounted for: school closed (principally proprietary schools), records lost or destroyed, or student enrolled but either not long enough to generate a transcript or was classified as a special, non-credit student.

The postsecondary transcripts were originally (1984) coded by temporary office workers using the 1981 version of The Classification of Instructional Programs (CIP). The CIP system, created by the National Center for Education Statistics, has served as the de facto national standard for reporting enrollments and credentials in postsecondary programs since 1981.

Programs are not courses, and the CIP taxonomy was not designed with transcript analysis in mind. Nonetheless, it had been used to code postsecondary transcripts in all the longitudinal studies sponsored by the National Center for Education Statistics. We thus inherited the basic CIP system and its transcript applications as a given.

Previous assessment by OERI staff determined that approximately 40% of the 485,000 instances of course-taking recorded in the NLS/PETS transcript sample were not coded accurately, and that the "miscoding" was as much a function of the CIP system as it was the result of limited technology and quality control in the coding process. Other agencies, including the Commission on Workforce Quality of the U.S. Department of Labor and the National Science Foundation, reviewed this assessment and recognized the incredible potential of this database once it was cleaned. Both agencies thus provided financial support for this project.

Basic Order and Marching Orders

Hence, we undertook the recoding of the data base, including a reconstruction and reconfiguration of the CIP system according to preestablished criteria and rules. In so doing, however, we chose to retain the basic order and structure of the CIP, to wit:

- o six-digit codes for each course/program, the first two of which indicated a broad field;
- o fifty broad fields, arranged in alphabetical order from Agribusiness to Visual and Performing Arts;
- o the use of "99" as the last two digits of a six-digit code to designate either indeterminable, missing, or other entries;
- o the use of "01" as the last two digits of a six-digit code to designate general treatments of the subject matter.

While we made some obvious semantic adjustments for purposes of coding courses (as opposed to programs): e.g., "01" designates introductory level courses in fields where distinctions between the general/introductory course and upper-level courses are made; we kept this basic order and structure because it did the least violence to a system that was already familiar to college registrars, institutional research officers, state departments of higher education, and other users.

Whether applied to credentials or courses, the CIP system has considerable faults as a taxonomy, and, in my opinion, ought to be scrapped and built de novo (over 100 of the 1,100 categories in the 1985 edition of the CIP failed to yield any data whatsoever on credentials awarded at any level of postsecondary education in 1986, and another 100 yielded minimal instances). But this project was not the place in which to engage in that undertaking.

Initially, we focused recoding efforts on (a) CIP codes cancelled by the National Center for Education Statistics between the 1981 and 1985 editions of the CIP, codes that were nonetheless used in the 1984 coding of the NLS/PETS; (b) the nearly 25% of all instances of course-taking that were assigned to the various "99" ("Other") categories; and (c) the various "01" ("General") codes in those disciplines for which there was more than one code. Our objective was to render the unknown, known; and the general, specific. In examining the original coding of the transcripts, an ancient truism was reinforced: the word "other" invites abuse. Any category governed by such a word too easily becomes a garbage pail into which difficult problems and indeterminate realities are dumped.

After these tasks had been completed, we branched out to the other categories. In all, we reviewed entries under 850 of the original 1,099 CIP codes, and reclassified entries under 720 of those. In the process, we deleted 400 course categories and created 338 new categories.

Deletions and Additions: The Empirical Criteria

We observed an a priori rule that no course category would be maintained in the taxonomy unless there was sufficient empirical evidence for doing so. Six-digit CIP code categories were thus deleted if (a) they were redundant or unnecessary in light of other categories and/or if course titles could be placed more accurately in another category, or (b) they produced fewer than 22 valid instances of course-taking. The threshold of 22 was determined after the first of five major rounds of recoding, and was based on mean enrollments minus one standard deviation across all CIP codes after removal of outlying cases. There were three a priori exceptions to the 22-case threshold rule: (a) courses in which the subject matter has a direct relationship to national security interests, e.g. less commonly taught foreign languages; (b) courses in which the subject matter directly and explicitly concerns the history, culture, or experience of major U.S. minority groups; and (c) categories that, if eliminated, would leave no logical place in the entire system for the subject matter.

As for new codes, the vast majority resulted from disaggregations of categories of major disciplines in which the existing CIP

system offered only one code, e.g. Anthropology, Economics, Geography, History, Political Science, and Sociology. Others resulted from reconfigurations of fields in which the existing system distorted the presentation of student course-taking, e.g. Computer Science, Mathematics, Biological Sciences, or in fields for which we needed finer discrimination to accommodate special analyses, e.g. English, Music, and Physical Education Activities.

Traces of Consensus and the Taxonomy of Courses

The new categories/codes created in the processes of disaggregation or reconfiguration were drawn from one or more of the following:

- (a) where they existed, content specifications for Graduate Record subject examinations;
- (b) indices of sub-fields in the major journals of the disciplines;
- (c) categories used in surveys by such organizations as the National Research Council, the Mathematical Sciences Education Board, and the Modern Language Association;
- (d) statements on college curriculum by professional and accrediting bodies such as the American Chemical Society and the American Assembly of Collegiate Schools of Business;
- (e) the empirical character of the database itself, e.g. if there were 200 "Animal Behavior" titles previously classified as "Zoology: Other," they were pulled and reassigned to a new and unique code;
- (f) the advice of representatives of disciplinary associations who attended a series of open meetings conducted in 1989 by the National Center for Education Statistics to discuss revision of the CIP system for purposes of reporting degrees and program enrollments; and
- (g) the advice of 50 consultants, friendly advisers, and members of faculty review teams (see pp. vii-viii).

The first postulate informing this effort was that any field leaves unobtrusive traces of consensus concerning its content, and that those traces are public evidence, carrying higher authority than the testimony of individuals. De facto national examinations constructed with the advice and consent of representatives of scholarly or professional organizations constitute one such collection of evidence; indices of the literature included in the major journals of those fields (journals in which editorial committees represent the entire field) constitute another. To be sure, the indices reflect research and applications emphases, and thus are often too detailed to serve as a taxonomy of postsecondary instruction. But the indices are very much like an official topographical map, providing three-dimensional information on existing and emerging sub-fields.

This map is obviously colored and shaded by instructional and curricular practice, and by student choice behavior. It is for this reason that we did not rely on college catalogues for the taxonomy, since catalogue entries are too often wish lists of what may or may not be offered in course schedules, and certainly do not tell us what was actually studied.

Our second postulate was to be fair to the empirical character of a database that reflects the curriculum of the period, 1972-1982. It is likely that the course titles and categories of the following decade (1982-1992) will look somewhat different. But we won't know for certain until the 10-year postsecondary transcript sample for the "High School and Beyond/Sophomores" (Class of 1982) has been gathered.

The Primacy of Subject

In classifying courses, we observed the principle that subject matter took precedence over department of instruction. A course in "The Neurological Bases of Behavior," for example, could be offered by a Biology Department, a Psychology Department, or some other unit. For purposes of this taxonomy, however, we have a single slot for Neuroscience courses. It makes no sense to have more than one. Where there were exceptions to this principle, most were grounded in academic custom and usage, e.g. "Criminal Procedure" taught in a law school is not the same course as "Criminal Procedure" taught in a police academy.

Furthermore, the department of instruction is too often determined by the size, organizational complexity, and mission of an institution. In smaller institutions, fields such as sociology, anthropology, demography, and urban studies, are often combined in the same department. Large research universities have separate departments for all of these fields. Some community colleges have one department for all of "science." Institutional size, complexity, and mission are but tangentially related to the map of learning.

From a national perspective, there are two related reasons for the primacy of subject matter, reasons that do not emerge in typical applications of transcript information in individual colleges or other postsecondary institutions:

- (1) Providing Information to Policy-Makers on the Knowledge-Content of Work/Manpower Preparation.

That is, we want to estimate particular kinds of knowledge or skills that are being brought into the workforce by former students. For example, we might like to know how many people have studied sign language (usually AMESLAN) as an estimate of the potential workforce for assisting the deaf. If we code the courses all over the place (Audiology, Special Education, Health

Services), we will never be able to make that estimate. In our version of the CIP system and in our decision rules, there is only one place for all course titles with the words "sign language," "AMESLAN," or "manual communication."

(2) Providing Information to Learned and Professional Societies on Trends in Topics Studied in Their Fields.

Learned and professional societies are national (indeed, international) information systems. Through their conventions and publications they both monitor the extent to which new developments in their fields are being presented to future practitioners and influence the dissemination of knowledge through educational institutions. They thus play a critical role in maintaining the quality of postsecondary education. Data on specific subject matter is more important to these critical organizations than department of instruction.

The Process of Recoding

I was the sole coder for the entire process, a strategy that increases reliability (while introducing intra-coder bias) at the cost of timeliness. The process worked roughly as follows. For each field in which substantial reconstruction was deemed necessary, a preliminary taxonomy was developed based on one or more of the unobtrusive traces of consensus. We then stripped out of the transcript data all those courses that were originally assigned to codes in the field at issue. For each instance of enrollment, we knew the name of the institution in which the course was taken, the major of the student (where indicated on the transcript and validated), and, where appropriate, the number of credits associated with the entry. I then recoded--if necessary--according to the tentative taxonomy, developing decision rules as I proceeded.

In the cases of 17 major fields, e.g. Communications, Biological Sciences, History, the tentative taxonomy, new codings, and decision rules were then presented to an external team of faculty from the field at issue. These faculty came to the Office of Research for a day to review this work, make suggestions for changing the taxonomy, develop new decision rules, and mark up a computer print out of all course titles in the field--with corrections according to the way they saw things. I then reviewed their recommendations, accepted (on average, and after discussion) 90% of them, and recoded the course files again.

Where questions remained, we checked a sample of college and community college catalogues using a microfiche collection from 1977-78. Approximately 20 major titles were subject to this supplementary review, including "Visual Communications," "Human Growth and Development," "Conflict Resolution," "Communication Law," "Modern English Grammar," "Group Dynamics," and "Personal

and Social Adjustment."

For example, in the case of "Human Growth and Development," course titles had been coded under Biological Sciences, Psychology, Home Economics, Anthropology, and Education. The catalogue review provided decision rules that eliminated Anthropology and Education as options, created a new course category under Biological Sciences, and provided guidance for placing the remaining titles. As for "Modern English Grammar," institutional type turned out to be a determinant of classification: in most 4-year institutions, it was a linguistics course; in most 2-year institutions, a remedial English course.

"Visual Communications" was an interesting case because no clear-cut pattern emerged from the catalogue search: the title was found in roughly equal proportions under Advertising, Fine Arts, and Design. But the course was usually described as a general introduction to visual semiotics. It was thus given a new code as a general course in Arts, and with sufficient cases (over 100) to justify the category.

In addition to the primary process of focusing on the course as the unit of analysis, we also used the student and the student record. For other purposes, e.g. making sure that degrees, degree dates, dates of attendance, credits, etc. were accurate, I read through the complete records of over 10,000 students in the NLS/PETS, and under the NSF-sponsored portion of the project, an advisory panel examined the records of all students who earned Bachelor's degrees in the core science and engineering fields. In the process, one could easily spot miscodings of courses, since every record presents a distinct context and tone. For example, a course entitled, "Composition," might have been coded as "English Composition" or "Drawing." But the student record showed a major in Russian, no courses in Fine Arts, and the "Composition" course occurring in the third year of college. Such clues were sufficient for recoding the course under Russian language for that student. Over 4,000 titles were recoded by this method.

Once the original database had been corrected with these recoded course files, I ran some quality control checks, and, if necessary, made further changes. For example, we had some problems with the titles, "Mathematical Foundations"/"Foundations of Mathematics"/"Mathematics: Foundations." I had originally recoded these titles (and their variations) under "Pre-Collegiate Mathematics: General." The external review team pointed out that "Foundations," in Mathematics, was an advanced course, and a catalogue check confirmed that judgment. The titles were recoded accordingly. The quality control check, however, revealed that the vast majority of "Foundations" courses were taken in community colleges and/or by students who never earned any degrees. A set of decision rules was then developed to sort

the "Foundations" titles with reference to precise wording, institutional type, student major, and degree level. The titles were stripped again, and recoded again.

I should point out that this process was not applied to every one of the 1,099 course categories in the original CIP system or even the 1,037 categories in our final version. One doesn't need external review to sort geography courses by world area or music history courses by genre. The empirical character of the database drove the categories in those and similar cases. In effect, the database disaggregated and sorted itself.

For the portion of the project sponsored by the National Science Foundation, the process was somewhat more elaborate in that the work of the teams was both advised and subsequently reviewed by a five-person advisory board and NSF personnel. The fields covered included Agricultural Sciences, Computer Science, Engineering, Engineering Technologies, Allied Health Sciences, Clinical Health Sciences, Biological Sciences, Physical Sciences, and Science Technologies. Work on the Mathematics section had been previously reviewed by the Mathematical Sciences Education Board, which sponsored a presentation of our analyses of mathematics course-taking in December of 1988.

After course category construction, external review, revision, and quality control checks, all instances of course-taking in the NLS/PETS database have now been recoded accordingly. The process took more than two years. It might have continued, but there was a point of diminishing returns to this effort. The second section of this volume, starting on page 14, presents the revised taxonomy.

I do not pretend that the results are 100% accurate. There are categories that are still troubling, but because we were not working with original transcript documents, rather with coded files, there was little we could do about them. Courses with generalized titles in Marketing are a good example. It is difficult to know which of these titles were introductory Marketing courses in a Business Administration program, and which were courses in marketing/merchandising operations. "Interior Design" titles were another case: we wound up crediting most of them under either Architecture or Vocational Home Economics, but I'm not wholly happy with the results.

While we're close to 100% accuracy with degrees and degree dates, I would not claim more than 85% of the courses. I still think we have too many categories, and that some of them are shaky.

What Did We Learn About College Transcripts?

There are a number of lessons to be gleaned from this process that bear upon the presentation of curricular information.

The most important of these is that transcripts are records left by individuals, and should be fair to those individuals. Too often, they are not. Students present transcripts to graduate schools and employers, and in many cases what a graduate dean or corporate personnel officer reads is unintelligible. There were six major types of unintelligibility in course titles on the NLS/PETS transcripts:

- 1) **Gibberish.** "UC/IDIS," "BANA," "FORST/NISNE MARK" and "SO JO X" are typical of such entries. There were over 1,100 cases of unclassifiable gibberish in the NLS/PETS. Try "KNOW A TOM-ID-CRIME-GOD" on for size!
- 2) **Word Games.** "ZOOSEMIOTICS," "ZONOSIS," "DOTS TO DINOSAURS," and "TIME AFTER TIME" are among my favorites. The first of these is probably an animal behavior course, but it could also be graphic design. The others are impossible. Such titles, often the products of professorial marketing, challenge the reader to engage in interpretive games. Most readers of transcripts, such as graduate deans or prospective employers, don't have the time or patience for these games. The person who suffers as a result is the student.
- 3) **Fog/Snow.** The first title in #1 above might have also been presented as "University Course/Interdisciplinary Independent Study," a title that conveys very little information to the reader. Another variety of fog is the extremely generalized title, e.g. "IDEAS AND PROBLEMS," "APPLIED EXPERIENCES," "CONTENT," "SIMULATION," and (yes) "GOOD BOOKS." Orwell once observed that generalized diction falls like snow, blurring all distinctiveness. Presumably, students wish to present their efforts with distinct outlines. They deserve better than fog or snow.
- 4) **Inaccessible Codes.** "CHEMISTRY 126" is typical. Are graduate deans and prospective employers expected to carry around a full library of college catalogues to interpret such entries?
- 5) **Inaccessible Abbreviations.** Any faculty member who has worked registration lines or any academic administrator in a large institution knows what "SPED" or "HPER" or "OB" or "A&P" etc. mean. But to be fair to students, the presentation of courses on transcript should assume less experienced readers.
- 6) **Blanks.** A blank is just that. There are credits, a grade, but no course title. A prominent variation is the appearance of the department's name, e.g. "Mathematics." This variation is like the "fog" category, i.e. we have no idea what kind of math is at

issue. It could be anything from arithmetic to linear algebra.

How extensive is the unintelligibility resulting from such presentations? Excluding "inaccessible abbreviations" (a large category), I estimate one out of every eight course entries for the NLS/PETS. Half of these were in the "word game" genre, and were resolved at great expense of time. The rest wound up in the various bins marked "indeterminable," "missing," and "other." All represent information lost, information about what an individual did with his/her time in postsecondary education.

Second, while I would not advocate standardization of course titles, there is simply too much diversity out there. For example, there were nearly 50 distinctly different presentations for the introductory course in Communications. Since course numbering systems differ from one institution to another, we had to figure out from the title what was an introductory course in Communications. There is no reason anyone should have to develop decision rules and hire faculty teams to do that. Graduate deans won't do it and employers won't do it. It's the fairness issue once again; and students deserve better.

As for the number of course categories: in some fields, we're splitting too many hairs for efficient communication; in others, finer discrimination would help. No taxonomy of this kind is forever. New fields emerge; others dwindle in enrollments below meaningful levels. And we know that enrollments are often driven by labor market conditions, special circumstances, fad, and fashion. To repeat: I do not expect the final taxonomy for the 10-year postsecondary transcript sample of the High School and Beyond Sophomores (High School Class of 1982) to be the same.

How to Read the Taxonomy and Tables

The major fields of the taxonomy are presented in the order of the CIP system we inherited. Within each field, we first indicate the historical status of each course category:

OLD, i.e. in the 1985 version of the CIP, and used as described in that version;

MODified, i.e. in the 1985 version of the CIP, but modified in terms of subject matter coverage, course titles, etc.

NEW, i.e. a CIP code and category created for this analysis and in accordance with the empirical characteristics of the data base;

DELETED, i.e. in the 1985 version of the CIP but deemed misconstrued, inapplicable, and/or empirically

unjustifiable according to a "threshold rule"
(a minimum of 22 cases out of 485,000);

REstored, i.e. deleted from the CIP system between 1981
and 1985 by the National Center for Education
Statistics, but reinstated here.

We then list the major courses titles/topics covered by the
code/category, describe (where it is not obvious) the governing
concepts in cases of modified or new codes, and add the decision
rules (if any) used to determine precisely how a particular
course entry on a transcript was coded.

Previews of Coming Attractions

At the end of this rather exhaustive list, we provide four
appendices, three of which demonstrate the kind of data the
taxonomy yields when applied to a substantial national collection
of transcripts.

The first set of tables uses the student as the unit of analysis,
and lists the percentage of students who completed (not merely
enrolled in) undergraduate/pre-baccalaureate courses in each of
the 1,037 course categories. These data are weighted for two
categories of students: all who earned more than 10 undergrad-
uate credits (whether or not they earned any degree) over the 12-
year period covered by the NLS/PETS, and all who earned a
Bachelor's degree during that time. Within each of these
categories, the data are also provided for women and men.

The second appendix is a variation on the first: instead of 1,037
courses, the categories are aggregated to yield 103. Data are
presented, by race and sex, for six groups of students who earned
more than 10 undergraduate credits.

The third appendix takes all completed courses in each course
category, and presents a distribution of those courses by the
type of institution in which they were taken. This appendix
enables readers to judge which types of institutions were the
principle providers of specific knowledge to a generation.

The fourth appendix presents some basic data on the students in
the NLS/PETS: who they are and what they did in postsecondary
institutions over a 12-year period. These data are intended to
tease: they are but a preview of the coming attractions in
Archives of a Generation.

This collection of data should provide strong base-line
information against which to judge future postsecondary
transcript samples, hence to establish trends in the shifting
face of knowledge and its dissemination. The data, in fact,
color and shade the map.

**The Taxonomy: Revised Version of the
Classification of Instructional Programs
as Applied to Postsecondary Courses**

CIP Code

AGRIBUSINESS AND AGRICULTURAL PRODUCTION (01)

010101	<u>MOD</u>	Agricultural Business & Management: General; Agricultural Policy; Agric. & Government
010102	<u>MOD</u>	Agricultural Business/Finance/Marketing
010103	<u>OLD</u>	Agricultural Economics, Econ. of Ag. Production
010104	<u>OLD</u>	Farm & Ranch Management/Business
010199	<u>MOD</u>	Agricult. Business, Management & Marketing: Other
010201	<u>OLD</u>	Agricultural Mechanics, Farm Mechanics: General
010202	<u>OLD</u>	Agricultural Electrification, Farm Electrical Systems, etc.
010203	<u>OLD</u>	Agricultural Mechanics, Farm Shop
010204	<u>MOD</u>	Agricultural Power Machinery, Field Equipment: Operations and Management, Mechanized Feed
010205	<u>OLD</u>	Agricultural Structures, Equipment, Facilities
010206	<u>OLD</u>	Agricultural Soil/Water Practices, Hydrology, Irrigation, Tillage
		"Hydrology" also can appear under Agricultural Engineering (140301), as does "Soil Mechanics." Student major is the key to the assignment.
010299	<u>DEL</u>	Agricultural Mechanics: Other
		Did not meet threshold criterion after resorting.
010301	<u>OLD</u>	Agricultural Production: General
010302	<u>OLD</u>	Animal Production, Feed Lot Production, Pasture/Forage Production
010303	<u>DEL</u>	Aquaculture
		Did not meet threshold criterion.
010304	<u>MOD</u>	Crop/Cereal/Grain/Fruit/Pasture Production
010305	<u>DEL</u>	Game Farm Management
		Did not meet threshold criterion.

CIP Code

010399 **OLD** Agricultural Production: Other

010401 **MOD** Agricultural Products/Processes/Evaluation

010402 **DEL** Food Products (combined w/010401)

010499 **DEL** Agric. Prod & Processes: Other (combined w/010401)

010501 **DEL** Agricultural Services & Supplies: General
Did not meet threshold criterion after resorting.

010502 **DEL** Agricultural Services (combined w/010503)

010503 **MOD** Agricultural Supplies/Services
A title such as "Animal Feeds" was classified under 020204, not here. But "Animal Feed Supply" would be classified here. Titles referring to training of animals other than horses are placed here.

010504 **DEL** Pet Grooming
Did not meet threshold criterion.

010505 **DEL** Animal Training (combined w/010503)

010506 **DEL** Horseshoeing
Did not meet threshold criterion.

010507 **OLD** Horse Handling & Care, Horse Training, Paddock Management
But "Equestrian" in the title places the course in 360111. So does "horsemanship."

010599 **DEL** Agricultural Supplies & Services: Other
Did not meet threshold criterion.

010601 **OLD** Horticulture: General, Home Gardening, Organic Gardening, Plant Materials

010602 **OLD** Aboriculture, Woody Plants, Shrubs

010603 **OLD** Ornamental Horticult, House Plants, Indoor Plants, Floriculture

CIP Code

- 010604 OLD Greenhouse Operation
- 010605 MOD Landscaping, Landscape Plants, Landscape Management, Planting Design
- These titles do not cover "landscape architecture" or "landscape design." see 040601.
- 010606 OLD Nursery Operation
- 010607 MOD Turf Mangmnt., Recreational Turf, Turfgrass, Lawns
- 010699 DEL Horticulture: Other
- Did not meet threshold criterion after resorting.
- 010701 DEL International Agriculture.
- Did not meet threshold criterion after resorting.
- 019999 OLD Agribusiness/Agricultural Production: Other

AGRICULTURAL SCIENCES (02)

- 020101 OLD Agricultural Sciences: Gen., Intro. to Agricult.
- 020201 OLD Animal Sciences: General
- Covers general titles such as "Animal Physiology," "Animal Growth," "Physiol. of Domestic Animals." BUT titles such as "Vertebrate Physiology" or "Mammalian Physiology" are 260706.
- 020202 MOD Animal Breeding/Reproduction/Genetics, Artificial Insemination, Sire Selection
- 020203 MOD Animal Health, Farm/Range Animal Health/Diseases
- These were not veterinary medicine courses. Student major was the key to assignment. On the other hand, we found that "Large Animal Care" and "Small Animal Care" usually belonged in 182401. If the type of animal was indicated, e.g. poultry, the course was still placed here, and not under "Poultry" (020209).
- 020204 MOD Animal Nutrition, Feeds, etc.
- 020206 OLD Dairy

CIP Code

020208 OLD Livestock (Beef, Sheep, Swine)

020209 OLD Poultry

020299 OLD Animal Sciences: Other

020301 MOD Food Sciences, Food Systems, Food Production Processes, Dairy/Meat/Poultry Production Processes, Food Packaging Systems

See note at 190502. Student major is the key to assigning the simple course title, "Food Sciences." There is a difference, too, between "Production" and "Production Processing." When used in combination with "Dairy," "Sheep," or "Poultry," for example, the former is classified under 020206, 020208, or 020209.

020401 OLD Plant Sciences: General

These are not botany courses. See titles in the 2603 series for botany.

020402 MOD Agronomy, Crop Science, Seed Biology

020403 MOD Horticultural Science, Horticultural Botany, Horticultural Production, Plant Propagation

020408 MOD Plant Protect/Pest Management, Herbicides, Insecticides/Insect Control, Weed Control

As a title, "parasitology," standing alone, is to be found under Biological Sciences, not here.

020409 MOD Range Management, Range Lands, Grasslands

020499 OLD Plant Sciences: Other

020501 MOD Soil Sciences, Soil Conservation, Soil Pollution, Soil Chemistry/Physics, Soil Systems, Soil Fertility, Fertilizers, Fertilizers and Plant Nutrition, Soil Resources

We distinguished between the agricultural science "soil conservation" and the environmentally-oriented "land/water conservation" (030201). "Soil Engineering"/"Soil & Water Engineering" were classified under 140301.

029999 OLD Agricultural Sciences: Other

CIP Code

RENEWABLE NATURAL RESOURCES (03)

030101	<u>OLD</u>	Renewable Nat. Resources: Gen., Energy and Natural Resources, Land and Water Resources
030201	<u>MOD</u>	Land/Water Use, Management/Conserv, Soil Management, Water Resources, Water Rights
030202	<u>MOD</u>	Conservation: General, Conservation of Renewable Resources
030203	<u>MOD</u>	Resource Mgmt & Regulation, Environmental Policy, Environmental Impact
030299	<u>DEL</u>	Conservation and Regulation: Other Unnecessary category.
030301	<u>MOD</u>	Fishing & Fisheries, Fish Culture, Fish Management, Fishery Biology
030401	<u>MOD</u>	Forestry Production: General, Farm Forestry, Forest Products, Forest Utilization, Pulpwood
030402	<u>DEL</u>	Forest Production Combined with 030401.
030403	<u>DEL</u>	Forest Products Utilization Did not meet threshold criterion.
030404	<u>DEL</u>	Forest Prods Processing Tech. (combined w/030401)
030405	<u>MOD</u>	Logging, Forest Harvesting
030499	<u>DEL</u>	Forestry Production and Processing: Other Did not meet threshold criterion.
030501	<u>MOD</u>	Forestry & Related Sci: General, Intro. to Forest Resources, Conservation of Forest Resources
030502	<u>MOD</u>	Forestry Science, Dendrology, Forest Hydrology, Forest Soils, Forest Biometrics
030504	<u>DEL</u>	Forest Engineering Did not meet threshold criterion after resorting.

CIP Code

030506 OLD Forest Management, Silviculture
030509 MOD Wood Science, Forest Mensuration, Tree Growth and Development
030599 OLD Forestry & Related Sciences: Other
030601 MOD Wildlife Mgmt & Conservation
039999 OLD Renewable Natural Resources: Other

ARCHITECTURE & ENVIRONMENTAL DESIGN (04)

040101 OLD Architecture & Environmental Design: General, Man-Made Environment
040201 MOD Architecture, Architectural Design, Archit. Design Studio, Archit. and Environment, Archit. and Human Behavior, Site Development, Archit. Practice, Housing Design, Archit. Methods, etc. Professional Evaluation/Registration

This code covers most of the major course titles in the basic architectural curriculum. Others are found under Architectural Engineering (140401), Architectural Technologies (1501 series), Architectural Drafting (480102), and History of Architecture (500740).

040301 OLD City, Community & Regional Planning
040401 OLD Environmental Design, Man-Made Environment
040501 MOD Architectural Interior Design, Interior Design Theory/Techniques, Commercial Space, Renovation

These are not home economics courses. For interior/home decorating, see 200505. "Interior Design" titles are very difficult to classify.

040601 OLD Landscape Architecture
040701 OLD Urban Design, Cityscape
040801 DEL Land Use Management

Belonged in 03 series, not here. All legitimate titles moved to 030201.

CIP Code

049999 OLD Architecture & Environmental Design, Other

Surprisingly (for the 1970s), there were not enough instances of "Historic Preservation" titles to justify a separate category, so they are found here.

AREA & ETHNIC STUDIES (05)

In coding courses in these fields, one must be careful not to include foreign language courses with titles such as "Italian Culture and Civilization," Geography courses with titles such as "Iberia," or Anthropology courses with titles such as "The People and Culture of Meso-America." Student major and the pattern of other coursework should aid in the designation.

050101 OLD African Studies

"African Nationalism" was classified under Political Science as Comparative/3rd World Politics (451007), but "Pan-Africanism," a movement encompassing more than politics or the ideology of nationalism, was coded here.

050102 MOD American Studies, Amer. Civilization, American Character, American Utopias, etc.

But "American Story" or "The Growth of American Civilization" and similar titles referring to general national development were treated as history surveys, hence under 450811. Too, "American Popular Culture" was classified under a new interdisciplinary category (300404).

050103 OLD Asian Studies: General

050104 OLD East Asian Studies

050105 OLD East European Studies

050106 OLD European Studies: General

"European Civilization" or "Europe's Story" were treated under history (450801), not here. A more typical title for this category would be, "European Cooperation and Conflict."

050107 OLD Latin American Studies

050108 OLD Middle Eastern Studies

CIP Code

050109 OLD Pacific Area Studies
050110 OLD Russian and Slavic Studies
050111 OLD Scandinavian Studies
050112 OLD South Asian Studies
050113 OLD Southeast Asian Studies
050114 OLD Western European Studies

See comments under 050106. A typical title for this category would be, "The Future of the EEC."

050115 OLD Canadian Studies
050199 OLD Area Studies: Other
050201 MOD Afro-American/Black Studies, Afro-Amer. Culture/
Folklore/Community Development/Dance/Social
Thought/Family/Politics/Church/Heritage; Black
Writers/Artists/Consciousness

These are either generalized titles, or titles applying to specific subject matter in which "Black" is used, and not "Afro-American." For example, "Afro-American Experience" was coded here because it is generalized; "Afro-Americans in the 19th Century" was coded under "Afro-American History" (450817). "Black Society" is found here, not under "Sociology of Minority Groups" (451103).

050202 MOD Native American Studies/Folklore/History

But "Native American Languages" is 161001.

050203 OLD Hispanic American Studies, Chicano Culture/Child/
History, Hispanic Culture, Barrios, Mexican-
American Culture, Puerto Rican Studies

"Hispanic Civilization" taught in Spanish
Departments was coded under foreign languages;
Puerto Rican history was coded under Latin
American History (450832).

050204 OLD Islamic Studies, the Nations of Islam

These are not courses in Religion or Theology,
rather in sociology or social history. Course

CIP Code

titles with specific reference to the Koran or Mohammed, etc. were coded under 380202.

050205 OLD Jewish Studies

These are not courses in Religion, Theology, or Bible. Course titles with specific reference to Talmud, Mishnah, Old Testament, Torah, etc. were coded under either the 38 series or the 39 series (if offered in Theological Seminaries).

050206 NEW Asian-American Studies

050299 OLD Ethnic Studies: Other

These were usually combination titles. "Ethnic Groups," however, does not belong here (see 451103).

059999 DEL Area and Ethnic Studies: Other

All titles here were moved into definitive categories in the 05 series.

BUSINESS & MANAGEMENT (06)

The recoding of business and management courses was informed by analyses of the CLEP examinations in business, accounting, and management fields, the statement of standards of the American Assembly of Collegiate Schools of Business, and a variety of publications on curriculum from AACSB. One objective of reconstruction was to clarify the distinctions among the six "core" fields of the business curriculum: management, accounting, finance, marketing, organizational behavior, and quantitative studies. In fact, the faculty who reviewed the first effort at reconstruction would have been happy with those six categories plus a code for general business and a code for "other."

In order to achieve this objective, we brought together the various topics in finance under a four digit series, 0603, combined two topics dealing with personnel, restored a code for business statistics (as distinct from economic statistics), redefined and/or expanded the coverage of codes for management science (0614) and organizational behavior (0615), collapsed topics under institutional management (0607), and developed three codes for accounting (0602).

060101 MOD General Business, Principles of Business, Business and Society, Social Environment of Business,

CIP Code

American Business System, Fundamentals, Foundations, Intro to Business, and other general Business Administration titles.

These titles are distinguished from Introduction to Management/Principles of Management (060401). Business History was coded with economic history under 450804.

060102 NEW Business Law, Legal Environment for Business, Law & Business, Business Transactions and the Law

Particularly when taken in law schools, courses with titles such as "Corporation Law," "Commercial Transactions," etc. should be coded 220101.

060104 NEW Business and Government, Regulation

060201 MOD Introductory Accounting, Principles of Accounting Accounting Systems

060202 NEW Tax Accounting, Taxes

But "taxation" or "taxes and estates" or "federal income tax" as courses taken in law schools were coded 220101.

060203 NEW Intermediate Accounting, Advanced Accounting, Cost Accounting, Auditing, Financial Communications, CPA Review, Managerial Accounting

This category was designed to cover intermediate and advanced topics in accounting.

060301 MOD Finance: Principles, Corporate, Capital Markets, Financial Management, Capital Management, Financial Decisionmaking, Financial Policy

But specific references to "farm," "crop" or "agricultural" finance were coded 010102.

060302 NEW Bank/Financial Institution Operations, Bank Management, Commercial Banking, Credit Operations

These titles were distinguished from "Money and Banking" under Economics (450657) and from banking occupations titles in the 0702 series. Institutional type and major (where known) were used to distinguish among these titles. "Banking" courses titles in proprietary business

CIP Code

schools, AVTIs, and community colleges are usually not finance courses, hence belong in the 07 series.

- 060303 NEW Securities and Investments, Stocks, Bonds, Commodities, Futures, Arbitrage, Securities Analysis/Valuation, Options, Investment Mgmt
Formerly 061001.
- 060401 MOD Management: General, Theory, Introduction to, Fundamentals of, Survey of, Business Org & Manage, Management Concepts/Games/Policy/Strategy
- 060402 DEL Contract Management, Procurement, Purchasing
Did not meet threshold criterion.
- 060403 MOD Operations Management, Product Management, Logistics, Inventory Control, Production Management, Production Planning
Some titles here had to be distinguished from those in Industrial Engineering (141701).
- 060499 DEL Business Administration & Management: Other
All titles here moved to definitive categories.
- 060501 OLD Business Economics, Managerial Economics, Econ of Business, Analysis of Business Conditions
- 060601 MOD Personnel Mgt., Human Resource Devel., Performance Appraisal and Promotion Systems, Compensation Administration
But "principles of supervision" titles that refer to teachers or schools were coded in the 1304 series. Student major is the key to the coding of such titles.
- 060701 MOD Institutional Management, Hotel Management, Restaurant Management, Hospitality Management
- 060702 DEL Recreation Enterprises Management
Most titles here belonged in the 0809 series (Hospitality and Recreation Marketing). The residuals were moved to 060701.

CIP Code

060703 DEL Resort Management

See comments for 060702.

060704 DEL Restaurant Management.

Most titles here belonged in the 2004 series (Food Services). The residuals were moved to 060701.

**060705 OLD Transportation Management, Freight Mgmt/Rates/
Tariffs, Physical Distribution**

Titles in "public transportation" were coded under Public Works, 440601; titles specifying aviation or airport management were coded 490104. "Traffic Management," was not placed here, rather under 060403. "Traffic Operations" is a Police Academy course, hence 430140.

060799 DEL Institutional Management: Other

Combined with 060701.

**060801 OLD Insurance & Risk Management, Principles of
Insurance, Introduction to Insurance, Family Risk
Management, Property/Casualty**

Titles specifying insurance marketing or sales were placed under 081001, not here.

**060901 OLD International Management, International Business,
Multinational Corporations (MNCs)**

But "International Economics/Finance/Trade" titles were placed in 450652.

061001 DEL Investments & Securities (renumbered 060303)

**061101 OLD Labor/Industrial Relations, Collective Bargaining,
Contract Arbitration, Labor-Management Relations,
Unions and Management**

**061201 OLD Management Information Systems, Business Systems
Design/Development**

061301 RES Business Statistics

"Business & Economic Statistics" was coded here, but "Economic Statistics" (without the word, "Business," was coded 450641.

CIP Code

"Business Math" was either 270901 or 270902.

061302 MOD Operations Research, Decision Science/Analysis
Mathematical Decisionmaking

The key word is "decision."

061303 MOD Management Science, Business Research, Quantita-
tive Methods/Studies/Techniques, Optimization

061399 DEL Management Science: Other

All titles moved to definitive categories.

061401 OLD Marketing, Marketing Management, Introduction to
Marketing, Distribution Channels, Marketing
Theory, Channel Management, Marketing Strategy

The most difficult decisions involved courses in "general marketing" or "introduction to marketing" that had been coded in the 0807 series. The decision rule was that if the courses were graduate (i.e. taken in the course of an awarded MBA) or the student's undergraduate major (if known) was 0603 (finance), 0604 (management), 0613 (operations research/quantitative studies), 0614 (marketing), or 0615 (organizational behavior etc.), then the course was classified under 0614. Institutional type was also used as a guide. The 0614 codes were generally applied to marketing courses in Bachelor's and Master's degree programs, not to programs at levels less than the Bachelor's.

061402 OLD Marketing Research, Behavioral Science in
Marketing, Consumer-Marketing Behavior

061499 DEL Marketing Management & Research: Other

All titles moved to definitive categories.

061501 MOD Organizational Behavior/Theory/Processes,
Organizational Development/Leadership

The keyword, obviously, is "organization." "Leadership," without that qualifier, was usually placed in 350104, as a personal development course.

061601 DEL Personnel Management (combined w/060601)

CIP Code

- 061701** OLD Real Estate, Land Finance/Leasing, Appraisal
But "Real Estate Law" and "Real Property Law" were classified under Law (220101), using the "primacy of subject" criterion.
- 061801** OLD Small Business Management/Policies/Operations
- 061901** DEL Taxation (renumbered 060202)
- 062001** DEL Trade and Industrial Supervision and Management
Titles originally coded here belonged in categories ranging from international trade (450652) to production management (060403) to industrial engineering (141701) to personnel management (060601).
- 062101** DEL Computer Installation Management
Produced no instances of coursetaking. Even if it had, the titles would be more properly placed in either the Business Support (07) or Engineering Technologies (15) series.
- 063001** NEW Internships in Business/Accounting, Co-Op Assignment: Management
- 064001** NEW Personal Finance
This is neither a personal service course nor a business home economics/family finance title. The former would be classified under "Coping Skills" (370102) and would be less than a three-credit course; the latter would contain the word, "family."
- 069999** MOD Business Administration: Indeterminate/Missing

OFFICE SUPPORT OCCUPATIONS (07)

The keyword "operations" or "operator" placed a course in this series as opposed to 06 or 11. Student major and degree level (in combination) also played a role in assignment of titles here. For example, "Banking" for an office occupations major with a certificate but no degree is assigned here, not in Business Administration (06) or Economics (4508).

- 070101** OLD Account & Bookkeeping Support: General

CIP Code

070102	<u>MOD</u>	Computer Accounting, Accounting Machines, Clerical Accounting, Secretarial Accounting Titles here do not refer to the study of accounting principles, rather to accounting operations.
070103	<u>OLD</u>	Bookkeeping
070104	<u>MOD</u>	Machine Billing/Office Machines, Business Machines
070199	<u>OLD</u>	Accounting & Bookkeeping Support: Other
070201	<u>MOD</u>	Banking & Related Financial Prog. Support, Teller Operations, Credit Procedures
070203	<u>DEL</u>	Insurance Clerk Produced no instances of course taking.
070205	<u>DEL</u>	Teller Did not meet threshold criterion. Combined with 070201.
070299	<u>DEL</u>	Banking and Related Financial Programs: Other Combined with 070201.
070301	<u>OLD</u>	Business Data Processing: General Without the word, "Business," data processing courses were coded as 110301.
070302	<u>OLD</u>	Business Computer Operation, Terminal Operations
070303	<u>OLD</u>	Business Data Entry Equip Operation, Key punch, Sorter
070304	<u>DEL</u>	Business Data Peripheral Equipment Operation Did not meet threshold criterion.
070305	<u>OLD</u>	Business Data Programming This is not a computer science applications course: Fortran or COBOL "for Business" courses were classified under 110603.

CIP Code

070306 DEL Business Systems Analysis

The courses originally coded here more properly belonged in computer science (11 series).

070399 DEL Business Data Processing and Related Programs: Other

All titles resorted into definitive categories.

070401 OLD Office Supervision/Management

070501 OLD Personnel & Training Programs

070502 DEL Training Assisting

Did not meet threshold; all titles to 070501.

070503 DEL Personnel Assisting

Did not meet threshold; all titles to 070501.

070599 DEL Personnel and Training: Other

Unnecessary category.

070601 OLD Secretarial Programs: General, Secretarial Science

070602 OLD Court Reporting, Transcribing

070603 MOD Executive Secretarial, Managerial Typing

We split "managerial" from "production" typing titles, placing the latter in 070702.

070604 OLD Legal Secretarial

070605 OLD Medical Secretarial, Medical Dictation/Typing/ Machine Transcription

Titles here are distinguished from those in Medical Office Management (170505) and Medical Records Administration (180703).

070606 OLD Secretarial Practices/Procedures

070607 MOD Stenography, Dictation, Gregg Method, Stenotype Pitman Method, Short Hand

CIP Code

07C699 OLD Secretarial Programs: Other

070701 OLD General Office Programs

070702 MOD Typing, Clerk-Typist, Production Typing, Speed and Accuracy, Advanced Typing

Most of the typing titles can be found here. But courses designed for personal (and not occupational) typing skills were placed in 320108 (see the rules at that entry).

070703 MOD Business Correspondence

070704 OLD Duplicating Machine Operation, PhotoDuplication

070705 DEL General Office Clerk

Produced no valid instances of course-taking.

070707 OLD Receptionist

070708 DEL Shipping, Receiving and Stock Clerk

Did not meet threshold criterion.

070709 DEL Traffic, Rate and Transportation Clerk

Did not meet threshold criterion.

070799 OLD General Office Programs: Other

070801 OLD Word Processing

070901 NEW Business Communications, Business English

These titles are to be distinguished from "Business Writing" (231101), Business Speaking (231001), and Business Correspondence (070703).

079999 OLD Business Support: Other

SPECIALIZED MARKETING & DISTRIBUTION (08)

Many of the codes and titles in this area describe courses that may be offered in high school, but not in postsecondary institutions. Obviously, there are important exceptions. If program certificates are offered in some of these areas in proprietary schools and/or AVTIs, they did not turn up in the

CIP Code

PETS sample. There is a residual confusion in the codes beginning with 0807 that was difficult to resolve without doing considerable violence to the existing CIP system. In the future, the definition of these categories should be confined to technical operations, so that the distinction between the marketing section of Business Administration (0614) and this section is more definitive.

080101 **DEL** Apparel & Accessories Marketing: General
All titles moved to 080102.

080102 **MOD** Fashion/Apparel Marketing

080103 **OLD** Fashion Modeling, Make-Up, Cosmetics
These are not cosmetology courses (see 120403).

080104 **DEL** Footwear Marketing
Produced no instances of course-taking.

080105 **DEL** Jewelry Marketing
Produced no valid instances of course-taking.

080199 **DEL** Apparel and Accessories Marketing: Other
Unnecessary category. No instances.

080201 **DEL** Business and Personal Services Marketing: Gen.
Produced no valid instances of course-taking.

080202 **MOD** Display, Visual Merchandizing, Exhibit Design

080203 **DEL** Marketing of Business or Personal Services
No distinction between this category and 080201.
No instances of course-taking, anyway.

080299 **DEL** Business and Personal Services Marketing: Other
Unnecessary category. No instances.

080401 **DEL** Financial Services Marketing
No valid titles.

CIP Code

080501 **DEL** Floristry, Farm and Garden Supplies Marketing
through
080599 Entire series (four codes) failed to produce one
valid case of course-taking.

080601 **MOD** Food Marketing: All

080602 **DEL** Convenience Store Marketing
No instances.

080603 **DEL** Specialty Foods Marketing
No instances.

080604 **DEL** Supermarket Marketing.
All cases moved to 080601.

080605 **DEL** Wholesale Food Marketing.
All cases moved to 080601.

080699 **DEL** Food Marketing: Other
Unnecessary category. No instances.

080701 **DEL** Auctioneering
Did not meet threshold. Moved to 080799.

080702 **OLD** Industrial Sales

080703 **OLD** International Marketing

080704 **OLD** Purchasing, Buying

080705 **OLD** Retailing, Retail Operations

080706 **MOD** Sales, Salesmanship, Sales Strategies

080707 **DEL** Wholesaling
Did not meet threshold criterion.

080708 **OLD** Marketing/Distribution: General/Intro/Principles
of, Promotional Marketing
Courses with the title, "marketing," coded here
had to be distinguished from those coded in the

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0614 series. The principal determinant was the student's major, when known. See comments on 061401. If the student's major was in the 08 series or 061401 then the course is here. Institutional type was also used as a guideline, e.g. "General Marketing" courses in AVTIs and proprietary business schools were coded here.

080799	<u>OLD</u>	General Marketing: Other
080801 through 080899	<u>DEL</u>	Home and Office Products Marketing No code in this eight-code series met the threshold criterion. Six of the eight codes failed to yield any instances of course-taking.
080901	<u>OLD</u>	Hospitality & Recreation Marketing These titles were distinguished from "hotel management" titles that were consolidated in 060701. The concepts that govern this category are promotion, marketing, and sales, not operations and finance.
080902	<u>DEL</u>	Marketing of Hotel/Motel Services Did not meet threshold; moved to 080901.
080903	<u>DEL</u>	Marketing of Recreational Services Did not meet threshold; moved to 080901.
080904	<u>DEL</u>	Recreational Products Marketing Did not meet threshold; moved to 080901.
080905	<u>DEL</u>	Waiter, Waitress and Related Services Does not belong under "Marketing/Distribution." Moved to 12 series (Consumer, Personal, and Miscellaneous Services) under 129999. There were too few cases to place it anywhere else.
080999	<u>DEL</u>	Hospitality and Recreation Marketing: Other No cases.
081001	<u>OLD</u>	Insurance Marketing
081101	<u>OLD</u>	Transportation & Travel Marketing

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081102	<u>DEL</u>	Transportation Marketing No valid cases.
081104	<u>OLD</u>	Tourism
081105	<u>MOD</u>	Travel Services Marketing, Travel Planning, Ticketing
081106	<u>DEL</u>	Warehouse Services Marketing No cases.
081199	<u>DEL</u>	Transportation and Travel Marketing: Other No cases.
081201	<u>DEL</u>	Vehicle and Petroleum Marketing: General No cases.
081203	<u>OLD</u>	Auto Vehicles/Accessories Marketing
081204	<u>DEL</u>	Petroleum Wholesaling. No cases.
081205	<u>DEL</u>	Recreational Vehicles/Accessories Marketing Did not meet threshold; moved to 081203.
081206	<u>DEL</u>	Service Station Retailing Did not meet threshold; moved to 089999.
081207	<u>DEL</u>	Vehicle Rental and Leasing No cases.
081299	<u>DEL</u>	Vehicles and Petroleum Marketing: Other Unnecessary category. No cases.
089999	<u>OLD</u>	Marketing/Distribution: Other

COMMUNICATIONS (09)

As a field in U.S. higher education, Communications is a conglomerate. Its sources lie in a variety of disciplines, and

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the shape of its curriculum in any one institution reflects local history more than national consensus. In some cases, Communications emerged from the Speech and Theatre/Drama subdivisions of English departments to embrace film and television. In others, it grew from the work of political scientists and sociologists who studied public opinion, propaganda, and mass persuasion, and who transformed the field into the broader area of semiotics. In still other cases, local departments were enlarged programs of journalism. The coding of courses in this field focused on three borders: those with English (23 series), Communications Technologies (10 series), and Film Studies (5006 series). The decision rules we established strengthened those borders, but given the nature of the field did not resolve all ambiguities.

We inherited a coding that had assigned virtually every title with the word "communication" to the 09 series, including "Animal Communication" (should be 260707, "Animal Behavior," a new code); "Manual Communication" (should be 170410, "Sign Language"); "Visual Communication" (a generalized title under Fine Arts, for which a new category, 500102, was created) etc. We combined the hundreds of titles in "Business Communications" with "Business English" titles in a new category (070901) under Office Support/Secretarial topics. Indeed, the vast majority of those courses were taken by students in community colleges and proprietary schools who were "majoring" in Office Support fields. On the other hand, "Managerial Communication" was assigned to 061501 (Organizational Behavior, etc.).

090101 MOD Communications: General, Principles, Oral Communication, Speech Communication, Human Communication, Fundamentals/Foundations of Communication, Communication in/and Society

We reserved the "speech" courses in English (231001, 231002, and 232003) for titles that were specific to either advanced (Debate, Public Speaking, Oral Interpretation, Voice, etc.) or remedial topics (the phrase "basic oral communication" as opposed to "basic principles of communication" placed the course in the remedial series in English, 2320. Likewise, general titles such as "Communication Skills" were assigned to the new 2320 series. The courses assigned here were the residual titles, often very generalized.

090201 MOD Advertising, Copywriting, Commercials, Media Planning, Marketing Communications

These titles were distinguished from those in

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marketing (0614 series, 0807 series) or distribution (other 08 series), as well as skills and technical courses in Commercial Art/Graphic Communications (4802 series) and Graphics (5004 series).

090301 MOD Communications Research/Theory

Courses in "Interaction Process Analysis" went here and not in Applied Psychology (350101) or Interpersonal Communication (091001). Courses in semiotics and semiotic theory were placed here and not in Philosophy.

090401 MOD Journalism, Reporting, Editing, Photojournalism Feature Writing, News Gathering, Editorial Writing

The range of titles here (in combination with qualifiers such as "magazine" or "newspaper") covers most of the undergraduate journalism curriculum. The graduate curriculum may add other titles, but there were too few cases to know for sure.

090501 OLD Public Relations

090601 OLD Radio/TV News Broadcasting/Writing/Gathering, Directing, Producing, Broadcast Journalism

The titles here referred specifically to news.

090701 OLD Radio/TV: General, Writing, Directing, Pro- gramming; Writing for Non-Print Media

TV production, when specified, was classified in the communications technology series (10), as were titles referring to FCC license preparation. "Announcing" courses were considered performance courses, and placed under Public Speaking (231001)

090801 DEL Telecommunications

Did not meet threshold criterion. Titles originally assigned here more properly belonged to either Engineering or Communications Tech. For the category to be viable, topics should be restricted to common carriers (telephone, satellite), data communication, etc.

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- 090901** NEW Mass Communications, Mass Media, Communication Systems, History of Mass Communication
- Basic survey courses in mass media. Titles covering a range of specified media, e.g. "Radio/TV/Film" were coded here. But "Film as Communication," for example, was placed in 500601.
- 090902** NEW Public Opinion & Propaganda
- If political elections were specified in the title, the course was classified under "Political Behavior" (451009).
- 090903** NEW Communication Law, Ethics, Regulation, Freedom of Press and Speech, Press and Society
- If these courses were taken by students enrolled in Law School, they were classified under 220199, and not here.
- 091001** NEW Interpersonal Communication, Small Group Communication, Intercultural Communication, Personal Persuasion, Non-Verbal Communication
- While most communication is "interpersonal," we distinguished between these titles and those under 090101, by their specificity. We also distinguished between the titles here and those in the 0909 series by the criterion of reference to public contexts or mass media. "Persuasion" is here, but "Mass Persuasion" is in 090902. "Persuasive Speaking," as opposed to "Persuasion," was placed under 231001 (Public Speaking, Debate).
- 091002** NEW Interviewing
- Courses in "interviewing" are given in many departments, e.g. psychology, social work, journalism. Unless the title specified a distinct disciplinary context, though, it was placed here.
- 092001** NEW Internships in Communication, Journalism
- 099999** OLD Communications: Other, Missing

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COMMUNICATIONS TECHNOLOGIES (10)

Communications Technologies cover courses in discrete production aspects of media. They are not to be confused with Communications Engineering (141001), or any of the categories describing writing or directing for the media (see both the 09 and 5006 series).

100101 OLD Educational Media Technology, Audio-Visual Communication, AV Equipment/Production/Materials

If the title referred to "instruction" through educational media, it was coded as 130501.

100102 OLD Motion Picture Technology

100103 OLD Photographic Technology, Camera Theory, Photo Sensitometry

A title such as "The Physics of Light/Photog" was coded here, not under Physics.

100104 MOD Radio/TV Production Technology, Broadcasting Technology, FCC License, Broadcast Operations, Cable TV Operations, Radio Engineering

100105 MOD Sound Recording Technology, Sound Studio, Recording Systems

100106 DEL Video Technology

The few titles originally classified here were combined with 500606, "Video."

100199 OLD Communications Technologies.: Other

COMPUTER SCIENCE (11)

Courses with the word, "computer," in their titles are taught in a variety of departments and stress a wide range of competencies, from design to simple use. The principle used to guide the recoding of the entire NLS/PETS sample--that the topic of instruction takes precedence over the department of instruction--proved more difficult to apply in Computer Science and computer-related courses than elsewhere. But the identity of the institution in which the course was taught proved to be very helpful in refining the categories and reassigning courses. The 1985 CIP presented only seven codes for Computer Science courses under the "11" series, and we have added 12. The new

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scheme is designed to identify more advanced courses in computer science (what the Conference Board of the Mathematical Sciences refers to as Level II and Level III Computer Science courses), to distinguish among the different types of programming and applications courses, and to sort out "computer literacy" and general use courses from the pack.

110101 OLD Intro. to Computer Science, Computer Concepts, Computer Principles, Intro. to Digital Computers, Computer Science (with no other qualifiers)

110102 NEW Computers and Society, Computers for Non-Majors, Computer Literacy, Exploring Computers, etc.

These courses are not really Computer Science, rather personal service or basic skills courses.

110201 MOD Computer Programming, Programming in . . . (any major computer language, e.g. BASIC, PASCAL, COBOL, FORTRAN), Introduction to . . . (any major computer language)

The key preposition is "in." If the title read, e.g., "FORTRAN Programming for Business," it was classified elsewhere (110603).

110202 NEW Algorithms, Algorithmic Development/Methods

110203 NEW Machine Language, Assembler Language

110204 NEW Compiler Language, Grammar, Program Language Theory, Language Processing

110301 MOD Data Processing: General, Introduction; EDP; RPG (Report Program Generators), etc.

110302 NEW Data Structures, Information Structures

110401 OLD Information Science, Information Systems, Information Networks, Data Base Concepts, Data Base Management, File Organization

110501 MOD Systems Analysis, Systems Development, Computer Communication/Networks/Sub-Systems

If the word "design" appeared with any of the above (or analogous) titles, the course was placed in Computer Engineering (140901), provided it was taught in a 4-year college.

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110502 NEW

Systems Software, Systems Programming, OS, Software Methods and Design

Most of the courses in this category had been classified in 110501, but it is obvious that their emphasis on software engineering is qualitatively different.

110601 NEW

Computer Applications: General, Unspecified

110602 NEW

Computer Applications: Science & Engineering, Medical Information Science, Basic Scientific Programming, Engineering Computing Methods

110603 NEW

Computer Applications: Business/Management, COBOL and Business Applications, Computers in/for Business

Courses with titles such as "Business Computer Programming" or "Computer Programming: Business Orientation" were assigned to 070305, particularly if offered in 2-year colleges. "Management Information Systems" has its own code (061201), and the various categories in Management Science (the 0613 series) are detailed elsewhere.

110604 NEW

Computer Applications: Other Fields.

The "other fields" ranged from architecture to linguistics to general social science.

110701 NEW

"Advanced Topics," e.g. Cybernetics, Graphics, Simulation, Modelling, Plotting, AI, Automata

This category covers some of the "Level III" subjects in the undergraduate surveys of the Mathematics Sciences Education Board.

110801 NEW

Numerical Methods, Numerical Analysis, Linear Programming, Mathematical Programming

This category was designed to capture second-level computer mathematics courses normally taught outside Mathematics departments. Courses with titles such as "Computer Mathematics" or "Data Processing Math" were grouped with Finite and Discrete Math as mathematics courses (270202).

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- 110901 NEW Other Determinable Topics. The dominant titles here, however generalized, were Computer Lab, Computer Methods, Computer Problems, Computer Techniques, etc.
- 119999 OLD Computer Science: Unknown or Indeterminable.

CONSUMER & PERSONAL SERVICES (12)

The original version of the CIP system attempted to cover virtually every type of program offered in every sector of U.S. education. But the only sector that consistently uses the taxonomy in its national reporting is higher education; and there are dozens of CIP categories that yield no data on either courses or programs in colleges, community colleges, or proprietary vocational schools. Only 4 categories of the original 14 in this section were viable in terms of the NLS/PETS transcript sample.

- 120101 DEL Drycleaning & Laundering Services
No cases.
- 120202 DEL Bartending
No cases.
- 120203 DEL Card Dealing
No cases.
- 120204 DEL Umpiring
These titles were combined with "refereeing," "sports officiating," etc. and placed in 310501, a new code under the "Recreation" series.
- 120299 DEL Entertainment Services: Other
Did not meet threshold criterion.
- 120301 OLD Funeral Services, Embalming
- 120401 DEL Personal Services: General
No valid cases.
- 120402 DEL Barbering, Hairstyling
Combined with 120403.

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- 120403 MOD Cosmetology, Barbering, Hairstyling, Color Treatment, Physiology of Hair, etc.
- 120404 DEL Electrolysis
No cases.
- 120405 DEL Massage
No cases.
- 120406 DEL Make-Up Artistry
The limited number of titles here were moved to 500405 (Theatre Design, Stagecraft, Costuming).
- 120499 DEL Personal Services: Other
Did not meet threshold criterion.
- 129999 OLD Consumer/Personal Services: Other

EDUCATION (13)

Not all courses with the word, "Education," in their titles belong in the 13 series any more than all courses with the word, "Communication," in their titles belonged in the 09 series. For example, "Drug Abuse Education" is often a student personnel service course for college students, and was classified accordingly in the 34 series, particularly when the number of credits awarded was less than three and the student's major (if known) was other than Education. In many of these cases, we adopted the rule that "if the specialty is not a teacher certification category in at least a few states, the title probably does not refer to an education course."

In all the subject-matter education titles/codes (1313 series), subject matter took precedence over level of education. Thus, "Elementary School Science" was classified as Science Education (131316), not Elementary Education. Likewise, a particular subject taught "for elementary/secondary school teachers" was classified under education, not under the subject, e.g. "Chemistry for Teachers" is Science Education (131316), not Chemistry; "Geography for Elementary Teachers" is Social Science Education (131318), not Geography, etc.

One decision of note that cut across a number of existing categories, particularly in Special Education (the 1310 series) "Physical Education for Special Populations/Exceptional

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Child/Mentally Retarded/Handicapped" titles were placed in a new category for "Adaptive Physical Education," 171003.

130101 OLD Education: General, Education and Society, Problems in Education, Foundations of Education Theory and Practice of Education, Issues in, Public School System

But not "Social/Historical/Philosophical" Foundations. Those titles were placed under 130901.

130201 MOD Bilingual/Crosscultural Education, Bilingual Child, Bilingualism, Multicultural Education

130202 DEL Bilingual Education Assisting

Did not meet threshold criterion.

130299 DEL Bilingual/Crosscultural Education: Other

Did not meet threshold criterion.

130301 MOD Curriculum, Curric. Theory, Applied Theory

130302 NEW Instruction, Methods & Materials.: General, Creative Activities, Classroom Management, Classroom Discipline, Teaching Behavior, Listening/Learning Styles, Teaching Strategies, Teaching Process, Group Process in Education

This is the basic classroom methods category. It was used when neither the level nor subject matter was specified. Thus, "Methods in Math Education" was classified under 131311, not here; likewise "Classroom Management in the Secondary School" was placed under 131205, but the general title, "Classroom Management" would fall here.

130401 MOD Educational Administration: General, School Administration, Education & Law, Principalship, School Buildings and Grounds, School Finance

130402 DEL Administration of Special Education

Did not meet threshold criterion.

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- 130403 DEL** Adult and Continuing Education Administration
All titles here belonged in 131201.
- 130404 OLD** Educational Supervision
- 130405 DEL** Elementary and Secondary Education Administration
All valid titles moved to 130401.
- 130406 MOD** Higher Education Administration/Research,
Community College Administration

With the exception of "College Student Personnel Services" (a new category under Guidance, 131102) all higher education titles were consolidated in this category.
- 130407 DEL** Community College Administration

Did not meet threshold. Titles moved to 130406.
- 130499 DEL** Educational Administration: Other

Unnecessary category.
- 130501 OLD** Educational Media, Instructional Media/Technol,
Media for Elementary/Secondary Schools, Pre-
paration/Use of Media/A-V Materials

The category does not cover "Operation of A-V Equipment," or the keyword, "Audio-Visual" without a specific reference to teachers or level of schooling. These other titles were placed in 100101.
- 130601 MOD** Evaluation and Research: General, Research
Methods, Evaluation Techniques, Program
Evaluation

Some of these titles referred specifically to "education." Others did not. In the latter case, we gave the original coders the benefit of the doubt, and let their assignments stand.
- 130603 MOD** Educational Statistics
- 130604 OLD** Educational Testing, Measurement, Assessment,
Individual Assessment

CIP Code

- 130605 DEL Elementary and Secondary Research
All valid titles moved to 130601.
- 130606 DEL Higher Education Research
All valid titles moved to 130406.
- 130699 OLD Educational Research: Other
- 130701 DEL International Education, Comparative Education
Did not meet threshold criterion.
- 130801 MOD Educational Psychology, Psychology of Learning, Human/Child Growth and Learning, Human Development and Learning, Learning Process, Learning in Schools

We split "school psychology" from "educational psychology" (they are different), and educational psychology from "developmental psychology" (420701) using the keyword, "learning." For "Child Development," see comments under 200102. Courses on developmental theorists, e.g. Piaget, were placed in 420701 unless there was an explicit reference to schools/schooling.
- 130802 NEW School Psychology
- 130901 MOD Social/Historical/Philosophical Foundations [of Education], History and Philosophy of Education
- 131001 OLD Special Education: General, Exceptional Child
- 131002 OLD Special Education: Culturally Disadvantaged
- 131003 OLD Special Education: Deaf/Hearing Impaired

These titles are distinct from those in the 1801 series in that they specifically refer to "Special Ed," "SPED," or any similar abbreviation.
- 131004 OLD Special Ed.: Gifted & Talented, Creative Child
- 131005 OLD Special Ed.: Emotionally Handicapped/Disturbed, Education for Autistic Children

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131006 OLD Special Education: Mentally Handicapped

131007 OLD Special Education: Multiple Handicapped

This category is also used for any Special Education title in which more than one handicap is mentioned, e.g. "Education of EMR."

131008 OLD Special Education: Physically Handicapped

131010 OLD Special Education: Remedial Education

This category is like 131002, i.e. the words, "Special Ed," are the key. "Remedial Reading" on the other hand, can be either a course in Reading Education (131315) or a basic skills course for underprepared college students (232002). Context determines the assignment.

131011 MOD Special Ed.: Learning Disabilities, Reading Disabilities

The keywords are either "disability" applied to a cognitive process or "LD." If the title were "Corrective Reading," for example, it belonged in 131315, "Reading Education," not here.

131012 OLD Special Education: Speech Correction

This code was not for Speech Pathology courses (1801 series). The title should refer either to "Special Ed" or "School" or "Classroom" to be coded here.

131099 OLD Special Education: Other

131101 OLD Student Counseling, Guidance, Educational and Vocational Guidance

The word, "counseling," also appears in course titles under "Counseling Psychology" (420601), Social Work (440701), and various categories of the 1704 series (Human Services). Student major is a helpful guide to placing the title. The titles under 131101 should refer to school settings. "Vocational Guidance" is sometimes a personal service course in the 32 series, e.g. 320105 or 320107. If a 1-credit course, we placed it there.

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131102 **NEW** Higher Education Student Personnel Services

131201 **OLD** TE: Adult and Continuing Ed, Teaching Adults, Community Education

We did not place the "agricultural education" extension course titles here, rather under 131301. "Parent Education," "Parental Involvement" and similar titles were coded as 200107.

131202 **OLD** TE: Elementary Education, Activities for Elementary School, Books/Materials for Elementary School, Elementary School Program, Playground Activities

Any subject matter "for Elem Teachers/School" title was placed under the 1313 (Subject Matter Education) series. There was one type of exception: titles referring to more than one subject, e.g. "Sci & Soc Sci for Elem." Those titles were placed here. Titles referring to curriculum, materials, classroom management, activities, etc. without the keyword, "elementary," were placed in either 130301 or 130302.

131203 **OLD** TE: Junior High/Middle School/Intermediate School

131204 **OLD** TE: Early Childhood/Pre-Elementary, Pre-School, EC/ECE, Young Child, Montessori Methods, Kindergarten

These designations supersede all other concepts attached to the title, e.g. "Counseling the Young Child" was assigned here, and not to Counseling (131101). One exception involved titles referring to testing and measurement; the other, student teaching/practicum/field experience (131501).

"Child Development" course titles, on the other hand, were placed in 200102.

131205 **OLD** TE: Secondary Education

These are methods, theory, materials, etc. courses with a specific level-of-education reference. Without the keyword, "secondary," these titles would be placed under either

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130301 or 130302 (the general "Curriculum and Instruction") categories.

131299 OLD TE: General Programs: Other, Indeterminable.

131301 OLD TE: Agricultural Education, Agricultural Extension Education, Cooperative Extension

131302 OLD TE: Art Education, School Arts & Crafts

131303 OLD TE: Business/Marketing/Distributive Education, Teaching Typing, Teaching Shorthand

131304 OLD TE: Driver and Safety Education

"Water Safety Instruction," however, was not coded here, rather in 310401. And most "Safety and First Aid" titles, particularly those carrying less than 3 credits, were treated as Health Activities courses, and coded 340105.

131305 OLD TE: English Education, Teaching Literature, Teaching Writing/Rhetoric/Composition

"Children's Literature" titles do not belong here, rather with Language Arts (131323).

131306 OLD TE: Foreign Language Education

131307 OLD TE: Health/Nutrition Education, School Health Program, Foundations in Health & Phys Ed., HPE Activities in Elem/Sec School, Sex Education

If "Health" preceded "PE" in the HPE titles, they were placed here; if the converse, then in 131314. If "school" was not mentioned in conjunction with "Health Activities," the title was placed in the 34 series.

131308 OLD TE: Home Economics Education

131309 MOD TE: Industrial Arts Education, Teaching IA, School Shop

131311 OLD TE: Mathematics Education, Concepts of Math for Elementary Teachers, Math in the Elementary/Middle/Secondary School

The key phrase for Math Education courses was "for teachers." However, course titles

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such as "Number Structures," "Number Systems," and "Math Structures," without any other qualification were classified 271001, i.e. as mathematics courses.

131312 MOD

TE: Music Education, Music Pedagogy, Music in Schools, Music Fundamentals for Elementary Teachers, Keyboard Methods & Materials, etc.

"Music Pedagogy" is not necessarily a course designed for teaching in school settings. Nonetheless, we decided to include it here.

131313 DEL

Nutrition Education

Merged with 131307.

131314 MOD

TE: School Physical Education, Coaching, HPE in Schools, Motor Development, Basketball/Soccer/Gymnastics/etc. for Elem/JHS/Sec Schools, Organization and Administration of HPE (but not HPER--see 171001), Teaching X (any specific sport or physical activity)

This code applies to school-based physical education curricula, i.e. courses to prepare physical education teachers for schools. We distinguished it from physical education for work in non-school settings, and from physical education courses that did not specifically reference a school context. These others are found either in the new HPER series (1710) or under the 31 series (Recreation). Neither "adaptive" nor "adapted" physical education titles were coded here. The former refers to training individuals to teach physical ed to special populations (hence is under Allied Health); the latter involves physical education for college students who themselves require special arrangements, hence is under the 34 series. All titles with the keyword, "coaching," were coded here, even though training in coaching can be applied in nonschool settings.

131315 MOD

TE: Reading Education, Diagnosis/Prescription in Reading, Corrective Reading, Basic Reading Instruction, Reading in Content Areas

If "reading" was accompanied by the phrase, "and language arts," the title was placed in 131323.

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- 131316** **OLD** TE: Science Education, X (any specific science) for Teachers, Teaching X (any specific science) in Elementary/Junior High/Secondary school.
- 131317** **DEL** TE: Social Science Education
- Combined with 131318. No guidelines could be developed to distinguish course titles in two categories.
- 131318** **OLD** TE: Social Studies Education, History/Geography etc. for Elementary/Secondary Teachers, Teaching X (any specific social science) in Elem/JHS/Sec School, Social Studies in Elem School/Grades
- 131320** **MOD** TE: Vocational Education, Technical Education, Philosophy of Voc Ed, Organization of Voc Ed
- 131321** **DEL** Computer Education
- Did not meet threshold criterion.
- 131322** **NEW** TE: Drama Education, Dance Education, Creative Movement for Children, Dance Activities Elem, Play Production Second. School, Teaching Theatre
- 131323** **NEW** TE: Lang. Arts, Children's Lit, Literature for Adolescents, Reading and Language Arts, Story-telling, Teaching Handwriting/Spelling, Teaching Language Skills
- Titles with the word "Reading" were placed here only when found in combination with "Language Arts," "Children's Lit," etc. Some states have different certifications for reading teachers and language arts teachers, and our revision of the codes acknowledges that distinction.
- 131399** **OLD** TE: Other, Indeterminable
- 131401** **OLD** TESOL, English for Non-English Child, Theory/ Practice of ESL
- 131501** **MOD** Student Teaching, Practicum, Directed Teaching, Field Placement, Observation & Participation, Supervised Teaching, Field Experience, Field Workshop, Internship, Supervised Teaching
- With the exception of student/directed teaching practicum, field experiences, etc. in content

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areas, e.g. "Student Teach: Art," all the above titles were placed here, and not under their respective level codes. "Student Teach: Elementary," for example, was placed here, not under Elementary Education.

139999 MOD Education: Indeterminable, Missing

The residual titles in Education were all cases of missing or indeterminable. The 13 series possesses enough "99" codes, e.g. 131299, 131399, to account for "Other."

ENGINEERING AND ENGINEERING TECHNOLOGIES (14 and 15)

The reassignment of course titles in Engineering (the "14" series) and Engineering Technologies (the "15" series) departed in many ways from analogous tasks in other fields. Perhaps no other areas in the CIP system illustrate better what the CIP was created to do: describe degree/credential programs, not courses. This is in the very nature of Engineering and Engineering Technologies. Each sub-field is a composite, an interdisciplinary that draws on many discrete courses from other areas of the college curriculum. And more than any other sections of the 1985 version of the CIP, the descriptions for each category in the 14 and 15 series truly delineate programs. Nonetheless, the CIP had been used to code courses, and, given that inheritance, our job was to make sure that the representation in Engineering and Engineering Technologies fields was as accurate as possible. The 14 and 15 series include many cases of parallel fields, e.g. Civil Engineering (140801) and Civil Technologies (1502), Mechanical Engineering (141901) and Mechanical Design Technology (150805), etc. In these cases, decision rules were established for the assignment of courses based on the institution of instruction.

The two series also include cases of courses with the same title, e.g. Fluid Mechanics, that could be taught in a variety of programs, e.g. (in this case) Aeronautical Engineering, Civil Engineering, Mechanical Engineering, or Engineering Mechanics. In these cases, the external faculty rating team decided to give the original coders the benefit of the doubt, and instructed us to leave those courses where they were originally coded unless there were other reasons (e.g. the institution did not offer Engineering degrees) for changing the assignment.

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140101 MOD Introduction to Engineering, Engineering Design, Engineering Communication, Professional Orientation, Engineering Concepts, etc.

We decided to include these titles under the "Engineering: General" code (as opposed to the "Other/Indeterminable" code, 149999).

140201 MOD Aeronautical Engineering, Aerospace Engineering, Astronautical Engin, Aerospace System Design, Aeroelasticity, Aerodynamics

If taught in universities with engineering programs, titles concerning Powerplant, Flight Mechanics, and Airframe should be placed here. Otherwise, they were assigned to Aeronautical Technology (150801) or reinstated Aircraft Mechanics (470602) codes, depending on the phrasing of the course title and the institution of instruction.

140301 OLD Agricultural Engineering, Farm Power Engineering

If "Soil Mechanics" was originally coded here, it stayed, even though its more customary assignment, as a title, would be Civil Engineering.

140401 OLD Architectural Engineering, Archit. Structures

140501 OLD Bioengineering, Biomedical Engineering

140601 DEL Ceramic Engineering

No cases.

140701 OLD Chemical Engineering, Biochemical Engin., Electrochemical Engin., Fluid Flow Applications

"Heat Transfer" and other engineering thermodynamics course titles that were originally placed here were left as coded. Most other instances of those titles were moved to Mechanical Engineering (141901).

140801 OLD Civil Engineering, Sanitary Engineering, Highway Engineering, Hydraulic Engineering Structural Analysis

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140901 MOD Computer Engineering, Computer Architecture, Systems Design, Digital Logic/Logic Design, Digital Computer Design/Theory, Digital Circuits, Log Pulse/Switch/Sequential Circuits

Any title with the word "digital" placed the course here, as opposed to in 141001.

141001 OLD Electrical Engineering, Electronics Engineering, Communications Engineering, Basic Electrical Circuits, Circuit Analysis/Design/Measurement/Theory, Solid State Engineering, Analog Signals

Courses with "AC" or "DC" or "Electricity" in the title were usually assigned to Electrical Technology (150302). Course titles such as "Communication Theory" or "Pulse Measurement" evidently confused coders (they look like they belong somewhere else). Student major is key.

141002 DEL Microelectronic Engineering

There were very few instances of microelectronics titles coded here, and most of these belonged under Electronic Technology (150303).

141101 MOD Engineering Mechanics, Statics, Dynamics, Kinetics, Applied Mechanics, Mechanics/Strength of Materials

The faculty rating team decided to move all courses with the above titles into this category, and without regard to institutional type.

141201 MOD Engineering Physics, Technical Physics, Applied Physics

Again, in this category, institutional type was not at issue in the decision rules.

141301 OLD Engineering Science

141401 MOD Environmental Engineering, Environmental Health Engineering, Sanitary Engineering

141501 MOD Geological Engineering, Geophysical Engineering, Geomechanics

This category combines the old 141501 and 141601.

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141601 DEL Geophysical Engineering

The number of valid instances of course titles here did not meet the threshold rule.

141701 MOD Industrial Engineering, Production Design, Human Factor Engineering, Time-and-Motion Study, Plant Layout, Facilities Design, Work Measurement

For purposes of analyzing courses, we modified the coverage of this code so as to place all the Engineering Management and Engineering Economics titles in a new, separate bin (141702).

141702 NEW Engineering Management, Engineering Economics, Cost Engineering, Manufacturing Management

141801 MOD Materials Engineering, Materials Science, Properties and Structure of Materials, Composite Materials

141901 MOD Mechanical Engineering, Heat Transfer, Engineering Thermodynamics, Automotive Engineering, Energy Conversion, Vibrations

142001 OLD Metallurgical Engineering

142101 OLD Mining and Mineral Engineering

142201 OLD Naval Architecture, Marine Engineering, Ship Design

142301 OLD Nuclear Engineering, Nuclear Energy Conversion, Nuclear Reactor Theory, Reactor Design

142401 OLD Ocean Engineering, Coastal Engineering

142501 OLD Petroleum Engineering/Processing/Production, Secondary Recovery

142601 OLD Surveying, Computer Mapping, Geodetic Surveying, Site Surveying, Photogrammetry

The placement of most courses here was heavily dependent on the identity of the institution. Most surveying courses offered in 2-year colleges were assigned to Surveying & Mapping Technologies (150203). Forest Surveying titles were assigned to Forestry Science (030502).

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142602 DEL Cartography

With few exceptions, cartography and related title courses (remote sensing, aerial photo interpretation, analytic cartography) were transferred to a new category/code, 450702, under Geography. While some of these courses appeared on transcripts of Engineering students, most did not.

142701 OLD Systems Engineering, Engineering Systems Analysis, Dynamics of Systems, Engineering Systems Design

142801 DEL Textile Engineering

The category was not empirically viable, i.e. it did not meet the threshold criterion.

145001 NEW Engineering Graphics, Engineering Drawing

These titles were distinguished from the Drafting series (4801), though many were offered in 2-year colleges.

147001 NEW Engineering Mathematics, Engineering Statistics, Engineering Computations

Courses with these titles were not offered in mathematics departments, and were not classifiable in the terms of the Mathematics ("27" series) categories/codes. "Calculus for Engineers" and similar titles, however, were coded under math (270601).

149999 OLD Engineering: Other, Indeterminable

150101 OLD Architectural Design and Construction Technology, Architectural Communications

This category included architecture and some civil engineering courses taught in 2-year colleges, including Building Environmental Systems, Building Layout/Materials/Methods.

150102 OLD Architectural Interior Design Technology

150199 DEL Architectural Technologies: Other

Unnecessary code.

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- 150201 MOD** Civil Technologies/Materials, Construction Cost Estimating, Contracts and Specifications, Construction Management
- The category was refined to exclude these administrative topics from 151001, Construction Technol.
- 150202 MOD** Drafting Technology, Electronic Drafting, Design Technology, Applied Design, Blueprint Reading, Model Making, Technical Illustration
- These titles are more distinct than those in the 4801 series, and are somewhat less vocationally oriented.
- 150203 OLD** Surveying Technology, Surveying, Mapping Technol. Construction Surveying, Land Surveying, Topographic Drafting
- 150204 DEL** Urban Planning Technology
- Nearly all courses originally classified here were miscoded and belonged in either the Architecture series (04) or Urban Studies (451201). The remainder did not meet the threshold rule.
- 150299 DEL** Civil Technologies: Other
- Unnecessary code.
- 150301 MOD** Computer Technology, Data Processing Hardware, Digital Electronics, Microtechnology
- 150302 OLD** Electrical Technology, DC and AC Applications
- 150303 OLD** Electronic Technology, AC Electronics, Basic Electronic Theory, Microwave Technology, Semiconductor Circuits, Active Devices
- Most "Electronic Devices" titles were offered by proprietary/vocational institutions, hence were placed in 470101. "Industrial Electronics" titles were assigned to 470105.
- 150304 DEL** Laser Electro-Optic Technology
- Did not meet threshold requirement.
- 150399 OLD** Electrical and Electronic Technologies: Other

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- 150401 DEL** Biomedical Equipment Technology
Did not meet threshold requirement.
- 150402 DEL** Computer Servicing Technology
The few titles originally coded here were very difficult to distinguish from either those in 150301 (Computer Technology) or 470104 (Computer Electronics). It was decided to place all these titles in 150301, and to delete 470104 as well.
- 150403 OLD** Electromechanical Technology, Electric Motor Controls, Automation, Numerical/Mechanical/Auto Controls, Electrical Machinery/Motors
- 150404 OLD** Instrumentation Technology, Analytic Instruments, Instrument Mechanics, Electronic Instrumentation
- 150405 DEL** Robotics Technology
Did not meet the threshold requirement.
- 150499 DEL** Electromechanical Instrumentation and Maintenance Technologies: Other
Did not meet the threshold requirement, even after sorting viable titles from 150401, 150402, and 150405 into this bin. All residual titles were thus assigned to 159999.
- 150501 MOD** Air Conditioning, Heating, Refrigeration, Solar Heating/Cooling Technologies, Hydronic Systems
Following the recommendation of the external faculty rating team, this category now combines the old 150505 and 150501.
- 150502 OLD** Air Pollution and Control Technology
- 150503 DEL** Energy Conversion and Use Technology
Did not meet the threshold requirement. Most of the extant titles belonged in 150501.
- 150504 OLD** Sanitation Technology, Sanitary Chemistry
- 150505 DEL** Solar Heating and Cooling Technology
See comments on 150501.

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150506	<u>OLD</u>	Water and Wastewater Technology, Treatment Plant Maintenance/Operations, Water Pollution Control, Solid Waste Processing
150599	<u>OLD</u>	Environmental Control Technologies: Other
150602	<u>DEL</u>	Food Processing Technology Did not meet threshold requirement.
150603	<u>OLD</u>	Industrial Technology, Industrial Materials, Industrial Mechanics, Control Systems
150604	<u>RES</u>	Manufacturing Technology, Manufacturing Processes, Assembly, Materials Technology, Manufact. Analysis
150606	<u>DEL</u>	Optical Technology Did not meet threshold requirement.
150607	<u>OLD</u>	Plastic Technology
150609	<u>DEL</u>	Textile Technology Did not meet threshold requirement.
150610	<u>OLD</u>	Welding Technology, Welding Theory/Process, Welding Metallurgy Many courses originally coded here, particularly those taught in vocational/technical schools, were reclassified as "Welding" (480508 under "Precision Metal Work").
150699	<u>OLD</u>	Industrial Production Technologies: Other
150701	<u>MOD</u>	Occupational and Industrial Safety, Safety Technology "Fire Protection Design/Management" titles were placed here, and not under the 4302 series.
150702	<u>OLD</u>	Quality Control Technology
150799	<u>DEL</u>	Quality Control and Safety Technologies: Other Unnecessary code.
150801	<u>OLD</u>	Aeronautical Technology, Aircraft Systems

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- 150803 OLD Automotive Technology, Fuel & Exhaust Systems, Drive Systems
- "Internal Combustion Engine" titles were placed here, not in Mechanical Engineering (141901).
- 150804 DEL Marine Propulsion Technology
- 150805 MOD Mechanical Design Technology, Analytic Mechanics, Power Mechanics, Machine Design/Processes, Tool Design, Mechanical Systems
- 150899 OLD Mechanical and Related Technologies: Other
- 150901 MOD Mining Technology, Mine Management/Production, Mine Ventilation/Hydraulics
- This category was originally confined to coal mining, and a separate category (150902) covered the same topics for other kinds of mining. In this version of the CIP, both are combined here.
- 150902 DEL Mining (Excluding Coal) Technology
- See comments on 150901.
- 150903 OLD Petroleum Technology, Exploration, Well Logging
- This is a rare case in which the number of instances in the NLS/PETS fell below the threshold of inclusion, yet all were valid, and there was no other place to put them in the CIP system. So the category was kept.
- 150999 DEL Mining and Petroleum Technologies: Other
- Unnecessary category.
- 151001 OLD Construction Technology, Construction Lab, Construction Studio/Methods/Planning
- 159001 NEW Engineering Technologies: General, Introduction
- 159999 OLD Engineering Technologies: Other, Indeterminable

FOREIGN LANGUAGES (16)

The reconstruction of the foreign language codes was fairly simple and straightforward. Only one major governing principle

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was added: a distinction between elementary/intermediate levels of language instruction and advanced levels, including courses in literature, culture, and linguistics. For comments on coding literature in translation courses, see 230301.

All codes were maintained (unless there were zero enrollments), even if they did not meet the threshold criterion, under the a priori rule that subjects of particular concern to the national security community would be represented in our version of CIP regardless of enrollments.

160101 DEL Foreign Languages: Multiple Emphasis

The category may be applicable to programs but rarely to courses. There were no cases.

160201 OLD African Languages

160301 MOD Chinese: Introductory & Intermediate

160302 MOD Japanese: Introductory & Intermediate

160321 NEW Chinese: Advanced, Literature, etc.

160322 NEW Japanese: Advanced, Literature, etc.

160399 OLD Other Asiatic Languages

160402 MOD Russian: Introductory & Intermediate

160403 OLD Other Slavic Languages

160499 DEL Balto-Slavic Languages: Other

No cases in the database.

160422 NEW Russian: Advanced, Literature, etc.

160501 MOD German: Introductory & Intermediate

160502 OLD Scandinavian Languages

160503 OLD Dutch

160521 NEW German: Advanced, Literature, etc.

"Faust" would be coded here if the student's major and/or other patterns of coursework in German justified it. Without any prior German, it would be coded 230301. So would a title such as "The

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Faustian Archetype."

160522 NEW Sandinavian Languages: Advanced

160599 DEL Germanic Languages: Other

No cases after resorting.

160601 OLD Greek: Classical, Attic Prose/Drama

But not "New Testament Greek" or Greek taught in theological seminaries--titles placed under Biblical Languages (390101).

160602 OLD Greek: Modern

160703 OLD Indic Languages (Sanskrit, Urdu, Hindi, etc.)

160901 MOD French: Introductory & Intermediate

160902 MOD Italian: Introductory & Intermediate, Italian for Music

160903 OLD Latin

But not when taught in theological seminaries using Biblical texts (a fact that is usually clear in the course title). Those courses are in Biblical Languages, 390101.

160904 MOD Portuguese: Introductory & Intermediate

160905 MOD Spanish: Introductory & Intermediate

160921 NEW French: Advanced, Literature, etc.

160922 NEW Italian: Advanced, Literature, etc.

160924 NEW Portuguese: Advanced, Literature, etc., Luso-Brazilian Literature

160925 NEW Spanish: Advanced, Literature, etc., Golden Age, Generation of '98

160935 NEW Spanish for Native Speakers

160999 DEL Romance Languages: Other

The very few cases here were in romance linguistics, and were moved to 169999.

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- 161001 OLD Native American Languages
- 161101 MOD Arabic: Introductory & Intermediate
- 161102 MOD Hebrew: Introductory & Intermediate
- But not when taught in theological seminaries using Biblical Texts. See 390101.
- 161121 NEW Arabic: Advanced, Literature, etc.
- 161122 NEW Hebrew: Advanced, Literature, etc.
- 161199 DEL Near Eastern Languages: Other
- No cases in the database.
- 169999 OLD Foreign Languages: Other, Indeterminable

ALLIED HEALTH (17)

A number of rules were established to govern the presentation of the Allied Health fields. First, it was agreed that all titles referring to "Aide" were not postsecondary titles, and were removed (there were few cases, anyway), particularly when titles and codes referring to "Assistant" and "Aide" were side-by-side. Second, that the existing combinations of the words "Clinical," "Medical," "Laboratory," and "Technology" were more confusing than enlightening. We resolved confusions either by modifying the coverage of a code and/or by deletion. Third, that courses in anatomy, physiology, pathology, or biochemistry that carried an explicit designation for a health/medical technologist or assistant were to be coded under the Biology service series, 2608. This decision was adopted under the primacy of subject matter rule.

There were three major additions to the area. The first, 170901, covers the generic introductory courses in Allied Health. A second, 172001, is a service course in Medical Terminology (which is also taken by secretaries working in doctors' offices and hospitals). And the third is the entire field of Health/Physical Education/Recreation, sometimes called (in the 1970s) "Movement Science and Leisure Studies." The courses in this field basically prepare one to enter the health/recreation club service industry and are to be distinguished from those that prepare one to be certified as a Physical Education teacher in schools (131314).

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170101	<u>OLD</u>	Dental Assisting
170102	<u>OLD</u>	Dental Hygiene
170103	<u>MOD</u>	Dental Lab Technology, Dental Materials/Ceramics, Crown and Bridge Construction
		If offered in dental schools to students pursuing a first professional degree in Dentistry, most titles here would be classified in the 1804 series.
170104	<u>NEW</u>	Oral/Dental Radiology
170199	<u>OLD</u>	Dental Services, Other
170201	<u>MOD</u>	Cardiovascular/Cardiopulmonary Technologies
170202	<u>DEL</u>	Dialysis Technology
		Did not meet threshold. Moved to 170299.
170203	<u>DEL</u>	Electrocardiograph Technology
		Did not meet threshold. Moved to 170201.
170204	<u>DEL</u>	Electroencephalograph Technology
		Did not meet threshold. Moved to 170299.
170205	<u>OLD</u>	Emergency Medical: Ambulance
170206	<u>OLD</u>	Emergency Medical: Paramedic
170207	<u>DEL</u>	Medical Radiation Dosimetry
		Did not meet threshold. Moved to 170209.
170208	<u>DEL</u>	Nuclear Medical Technology
		Did not meet threshold. Moved to 170209.
170209	<u>MOD</u>	Radiologic (Medical) Technologies, Radiation Dosimetry, Nuclear Medical Technol., Clinical Radiography, Radiation Therapy
170210	<u>OLD</u>	Respiratory Therapy Technology
170211	<u>OLD</u>	Surgical Technology

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170212	<u>DEL</u>	Diagnostic Medical Sonography Did not meet threshold. Moved to 170299.
170299	<u>OLD</u>	Diagnostic/Treatment Services: Other
170301	<u>MOD</u>	Blood Bank/Hematology Technology
170302	<u>OLD</u>	Chemistry Technology
170303	<u>OLD</u>	Clinical Animal Technology, Animal Care
170304	<u>DEL</u>	Clinical Laboratory Aide All "aides" categories were eliminated from college-level Allied Health.
170305	<u>DEL</u>	Clinical Laboratory Assisting Titles were moved to 170309.
170306	<u>DEL</u>	Cytotechnology Did not meet threshold criterion; titles moved to 170310.
170307	<u>DEL</u>	Hematology Technology All Blood/Hematology technology titles were combined in 170301.
170308	<u>DEL</u>	Histologic Technology Titles moved to 170310.
170309	<u>OLD</u>	Medical Laboratory Technologies The coverage of this category was expanded to include specialty laboratory technologies and occupations. The keyword is "laboratory."
170310	<u>MOD</u>	Medical Technology The coverage of this category was expanded to include specialty technologies.
170311	<u>MOD</u>	Microbiological Tech/Applied Microscopy
170399	<u>OLD</u>	Medical Laboratory Technologies: Other

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- 170401 MOD** Alcohol/Drug Abuse/Addiction, Treatment etc. Addiction and Dependency, Dependency Populations/Rehabilitation/Counseling, Substance Abuse Prevention Techniques
- But not titles (usually less than three credits) in Alcohol/Drug Abuse Information, e.g. "Drug Awareness," "Drug Attitudes," "Habit Forming Substances," etc. These are student service courses, and were coded under 340106.
- 170402 MOD** Community Health/Hygiene, Community Health and Welfare, Community Health Organization/Services
- We distinguished these titles from "Hygiene and Public Health" (182203), "Personal Health and Hygiene" (340101), and "School and Community Health" (131307).
- 170404 DEL** Home Health Aide
- All "aide" titles eliminated.
- 170405 OLD** Mental Health Assisting
- 170406 MOD** Mental Health Technology/Methods/Treatment
- 170407 OLD** Rehabilitation Counseling
- 170408 DEL** Therapeutic Child Care Work
- The very few titles here belonged under either rehabilitation (1708 series) or Social Work (440701).
- 170409 OLD** Population/Family Planning
- But "Population and Society" or "Population Dynamics" courses are Demography, 450501.
- 170410 MOD** Sign Language Interpretation, AMESLAN, Manual Communication, Signing
- All cases of instruction in signing were placed here, even if originally coded under Special Ed or Audiology. But one or more of the above words or phrases had to be in the course title.

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- 170499 OLD Mental Health/Human Services: Other
- Courses that wound up in this category often included the phrase, "Human Services," and were fairly generalized, e.g. "Human Services Field-work" or "Human Services Leadership."
- 170502 DEL Central Supply Technology
- No cases.
- 170503 OLD Medical Assisting
- 170504 DEL Medical Illustrating
- Did not meet threshold criterion.
- 170505 OLD Medical Office Management
- 170506 MOD Medical Records Technology, Health Record Applications/Systems
- 170507 MOD Pharmacy Assisting, Dispensary, Pharmacy Tech
- 170508 DEL Physician Assisting
- Did not meet threshold.
- 170510 DEL Podiatric Assisting
- No cases.
- 170512 DEL Veterinarian Assisting
- The few titles here belonged in 170303.
- 170513 DEL Health Unit Coordinating
- It was difficult to determine what the titles here meant. Most belonged under 180701.
- 170514 DEL Chiropractic Assisting
- No cases.
- 170599 OLD Allied Health Services: Other
- 170601 DEL Geriatric Aide
- No cases. For future versions of the CIP system,

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this category should be retitled and used to cover service courses in gerontology/geriatrics and health care for the elderly.

170602 DEL Nursing Assisting

Combined with 170605.

170605 MOD Practical Nursing, Nurse Assisting

170606 DEL Health Unit Management

The difference between this category and 170513 was difficult to determine. The few valid titles were moved to 180701.

170699 DEL Nursing-Related Services: Other

Most titles originally coded here belonged under the Nursing series (1811).

170701 MOD Ophthalmic Services & Technology: All

170705 DEL Optometric Technology

Combined with 170701.

170799 DEL Ophthalmic Services: Other

Unnecessary code. Combined with 170701.

170801 OLD Art Therapy

170802 DEL Corrective Therapy

Given other discrete categories in the CIP system, this category was deemed redundant and confusing.

170803 DEL Dance Therapy

No cases.

170804 MOD Kinesiology, Exercise Physiology, Movement Science

But not "Creative Movement," which is sometimes a Physical Ed Activities course (360108) or an Education course (131322).

170806 OLD Music Therapy

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170807	<u>MOD</u>	Occupational Therapy: all titles
170808	<u>DEL</u>	Occupational Therapy Assisting No valid cases.
170809	<u>DEL</u>	Occupational Therapy Aide No cases. No "Aide" categories.
170811	<u>DEL</u>	Orthotics, Prosthetics No cases.
170812	<u>DEL</u>	Orthopedic Assisting Did not meet threshold criterion.
170813	<u>OLD</u>	Physical Therapy: All Titles
170814	<u>DEL</u>	Physical Therapy Aide No cases. No "Aide" categories.
170815	<u>DEL</u>	Physical Therapy Assisting No valid cases.
170816	<u>MOD</u>	Recreational Therapy, Therapeutic Recreation Note that these are not "recreation" (series 31) titles. They must specify "therapy."
170817	<u>DEL</u>	Recreational Therapy Assisting No cases.
170818	<u>OLD</u>	Respiratory Therapy
170819	<u>DEL</u>	Respiratory Therapy Assisting No cases.
170820	<u>DEL</u>	Speech/Hearing Therapy Aide The titles originally coded here belonged in the 1801 series.

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170822 DEL Recreational Therapy Aide

No cases. No "Aide" categories.

170899 OLD Rehabilitation Services: Other

170901 NEW Health Services & Science: General

Also, "Contemporary Health Problems," "Health Care Systems," "Allied Health Studies," "Concepts of Health." Titles referring to "individual health" or "hygiene" were usually classified under 340101. Any title referring to "Health" that carries less than 3 credits probably should not be coded here.

171001 NEW HPER: Intro/General/Survey/History/Concepts

"Health, Physical Education and Recreation" (HPER) covers generic, non-schoolteacher-oriented courses. It is distinguished from "Physical Education" titles that refer to schools (131314), "Recreation" titles (31 series), physical education activities courses (usually carrying less than 3 credits), etc.

171002 NEW Athletic Injuries/Training, Care and Prevention of Athletic Injuries

171003 NEW Adaptive Physical Education, Physical Education for Special Populations

For "adapted" physical education, see 340107.

172001 NEW Medical Terminology

Whether "for secretaries" or "for lawyers" or for somebody else, all Medical Terminology titles were coded here.

179999 OLD Allied Health: Other

Does not cover such titles as "Math for Allied Health" (270801) or "Medical Law for Health Workers" (220199).

180101 MOD Audiology, Audiometry, Hearing Disorders, Aural Theory

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- 180102 MOD Speech Pathology//Neuropathology, Cleft-Palate, Stuttering
- 180103 MOD Speech-Language Pathology/Audiology, Communication Disorders, Hearing Science
- 180199 OLD Audiology/Speech Path.: Missing, Indeterminable

BASIC CLINICAL HEALTH SCIENCES (1802)

This subsection of the CIP evidently confused the original (1984) coders. Their confusion is understandable in light of the failure of the CIP to indicate that the topics covered by these codes are normally taught at the post-baccalaureate level, and in specialized schools of medicine, dentistry, and health sciences. The original coders thus classified thousands of Life Science "service" courses for undergraduate students of nursing, allied health, physical education, etc. in various "clinical health sciences."

Our reconstruction was designed to correct this misconception, and its decision rules were heavily dependent on institutional type and academic program. That is--and across all categories in the "1802" group--courses offered for students in clearly post-baccalaureate programs, e.g. "Anatomy for Dental Students," stayed, while those offered to students in pre-baccalaureate programs, e.g. "Anatomy for Nurses," were moved elsewhere. Likewise, "Clinical Anatomy" offered in a school of medicine stayed, while a course with the same title offered in a community college or a school of chiropractic was moved. In the process, we created a new set of categories/codes in the Life Sciences (the "26" series) for service courses (2608).

"Clinical Health Sciences" also describe programs and courses leading to Master's and Ph.D. degrees. Where a course, e.g. "Neuroanatomy" or "Microanatomy" was originally coded here and was offered by a doctoral-degree granting institution, we gave the original coders the benefit of the doubt, and let the entry stand.

The course title most frequently coded in the 1802 series was "Anatomy and Physiology" (also "Human A&P," "Body Structure and Function," and other similar titles). This course is not a Clinical Health Science course, rather a Biology service course, and, in our new CIP schema, is now coded 260801.

- 180201 MOD Clinical Anatomy, Medical Anatomy, Oral Anatomy, Microanatomy, Neuroanatomy

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Courses in Applied Anatomy, Head & Neck Anatomy in schools of chiropractic, etc. were moved to other categories.

- 180202 MOD Clinical Biochemistry, Dental Biochemistry, Medical Chemistry, Biochemistry of Medicinals
- Courses in "Organic Biochemistry" or "Physiological Chemistry" originally coded here but normally serving as service courses for nursing and allied health students, were moved to 260804 (a new category).
- 180203 MOD Clinical Microbiology, Medical Bacteriology, Medical Mycology
- 180204 OLD Clinical Pathology
- "Pathophysiology" and other similar titles were removed from this category and placed in the Biology service series (260803).
- 180205 MOD Clinical Physiology, Medical Physiology
- This code was also used to cover courses concerning the study of major functional organ systems, e.g. Cardiovascular, Respiratory, Renal, etc., and courses with the simple title, "Physiology," taught in medical schools and health science centers. "Human Physiology" titles, on the other hand, were classified under Biology (260706).
- 180206 DEL Clinical Toxicology
- Failed to meet the threshold rule.
- 180299 OLD Basic Clinical Health Sciences: Other
- 180301 OLD Chiropractic
- Virtually all courses taught in specialized schools of Chiropractic and which contained the key phrase, "for Chiropractic," were placed here.
- 180401 OLD Dentistry: General
- 180402 MOD Preventive Dentistry/Dental Public Health

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180403	<u>OLD</u>	Endodontics, RCT (Root Canal Therapy)
180404	<u>OLD</u>	Oral/Maxial Facial Surgery
180405	<u>OLD</u>	Oral Pathology
180406	<u>OLD</u>	Orthodontics
180407	<u>OLD</u>	Pedodontics
180408	<u>OLD</u>	Periodontics
180409	<u>MOD</u>	Prosthodontics & Restorative Dentistry, Crowns, Bridges, Bridgework
180410	<u>NEW</u>	Operative Dentistry/Oral Surgery
180499	<u>OLD</u>	Dentistry: Other
180701	<u>MOD</u>	Health Servs./Hospital Admin, Hospital/Health Unit Management
180702	<u>OLD</u>	Health Care Planning
180703	<u>OLD</u>	Medical Records Administration
180799	<u>OLD</u>	Health Servs Administration: Other
180901	<u>OLD</u>	Medical Laboratory
181001	<u>OLD</u>	Medicine: General
181002	<u>DEL</u>	Allergies & Endomology Did not meet threshold; moved to 181001.
181003	<u>OLD</u>	Anesthesiology
181004	<u>DEL</u>	Colon and Rectal Surgery No cases.
181005	<u>OLD</u>	Dermatology
181006	<u>OLD</u>	Emergency Medicine
181007	<u>OLD</u>	Family Practice

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181008	<u>DEL</u>	Geriatrics Titles originally coded here were not geriatric medicine titles, rather geriatric nursing or geriatric services (1907 or 4407 series).
181009	<u>OLD</u>	Immunology
181010	<u>OLD</u>	Internal Medicine Includes standard range of I.M. topics and specialties, such as Cardiology, Thoracic Medicine, Gastrointestinal Medicine, Urology, Endomology, etc.
181011	<u>DEL</u>	Neurological Surgery Did not meet threshold; moved to 181026.
181012	<u>DEL</u>	Nuclear Medicine Did not meet threshold; moved to 181099.
181013	<u>OLD</u>	Obstetrics and Gynecology, OBGYN
181014	<u>OLD</u>	Opthamology
181015	<u>DEL</u>	Orthodontic Surgery Did not meet threshold; moved to 180406.
181016	<u>OLD</u>	Orthopedics
181017	<u>OLD</u>	Otorhinolaryngology/Otalaryngology
181018	<u>OLD</u>	Pathology Only courses taught in medical schools should be coded here. See comments under 180204 and 260704.
181019	<u>OLD</u>	Pediatrics
181020	<u>OLD</u>	Physical Medicine & Rehabilitation
181021	<u>DEL</u>	Plastic Surgery Did not meet threshold; moved to 181026.
181022	<u>OLD</u>	Preventive Medicine

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181023	<u>OLD</u>	Psychiatry
181024	<u>OLD</u>	Neurology
181025	<u>OLD</u>	Radiology
181026	<u>MOD</u>	Surgery: General/Plastic/Thoracic/Neurological, etc.
181027	<u>DEL</u>	Thoracic Surgery No cases.
181028	<u>DEL</u>	Urology Moved to 181010.
181029	<u>OLD</u>	Hematology
181030	<u>DEL</u>	Sports Medicine Did not meet threshold after sorting. Moved to 181099.
181099	<u>OLD</u>	Medicine: Other
181101	<u>MOD</u>	Nursing: General/Principles/Fundamentals, Nursing Process/Clinic, Professional Orientation
181102	<u>DEL</u>	Anesthetist All valid titles were moved to 181003.
181103	<u>MOD</u>	Maternal/Pediatric Nursing Also Child Health, Obstetric Nursing, Care of Children
181104	<u>MOD</u>	Medical/Surgical Nursing, Operating Room Nursing, Emergency Room Nursing, Intensive/Acute Care Nursing, Cardiovascular Nursing
181105	<u>OLD</u>	Nursing Administration
181106	<u>OLD</u>	Psychiatric/Mental Health Nursing
181107	<u>MOD</u>	Public/Community Health Nursing

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181199 OLD Nursing: Other, Indeterminable

The "other" titles that wound up here included "Episodic Care," "Nursing Research," and similar titles that cut across the other categories.

181201 OLD Optometry

181301 OLD Osteopathic Medicine

181401 OLD Pharmacy

Includes all Pharmacy-related titles except Pharmaceutical Chemistry (400505), and Pharmaceutical Law (220199)

181501 OLD Podiatry

181701 DEL Pre-Dentistry

There may be degrees in "pre-dentistry," but there were no courses.

181801 DEL Pre-Medicine

There may be degrees in "pre-medicine," but there were no courses.

181901 DEL Pre-Pharmacy

Even assuming that there are degrees in "pre-pharmacy," there were no courses.

182001 DEL Pre-Veterinary

There may be degrees in "pre-veterinary," but there were no courses.

182201 OLD Public Health Lab Science

182202 OLD Epidemiology

182203 DEL Public Health Education

The titles originally coded here belonged either under 131307 (school-based health education) or 170402 (community health).

182204 OLD Public Health Practice/Management

CIP Code

182299 OLD Public Health: Other

182401 OLD Veterinary Medicine

The category covers the major titles in the Veterinary Medicine program. In addition to titles with any abbreviation of "Veterinary" in them (e.g. "Prevent Vet Med"), these include "Clerkship"/"Clinic" coupled with "Large," "Small," or "Domestic" Animals, "Feline Medicine," "Avian Diseases," (Gross) Anatomy or Physiology of "Domestic Animals," etc.

189001 OLD Clinic, Clerkship: Field Unspecified

189999 OLD Health Sciences: Other, Indeterminable

HOME ECONOMICS/VOCATIONAL HOME ECONOMICS (19 and 20)

The problems in these two sections stemmed from the original construction in the CIP system in 1979. That taxonomy was intended to apply to all levels of education, even though the CIP system was subsequently used principally for postsecondary analyses. The Vocational Home Economics series (20) was developed, in part, to describe high school home economics courses. While some of these titles turn up in postsecondary education, principally in community colleges and proprietary schools, most of them do not. Hence, many of the original codes produced either no data or minimal data, and were dropped. The entire 2006 section (Institutional Home Management), for example, failed to yield a single, valid course-title assignment.

Coders were evidently confused when roughly the same title was used in both the academic Home Economics series (19) and the Vocational (20), let alone in the personal service areas such as those covered in the 35 (interpersonal relations) and 36 (leisure and recreation) series, social work (4407 series) and design (5004 series). By referring to the identity of the institution and the student's major (where known), many of those cases were resolved in favor of the academic series. But there still were unsettling residues, principally among titles in the 2001 series, many of which could be personal service and development courses. We decided to let the original assignments stand because no decision rules could settle the assignments with reliability.

190101 OLD Home Economics: General

CIP Code

- 190201 MOD** Business Home Economics & Family Finance
- The keyword is "family." "Personal Finance," on the other hand, is coded under Business, 064001.
- 190301 OLD** HE: Family & Community Services, Family & Community
- Titles such as "Family Diagnosis and Treatment" usually belong under Social Work (440701), not here. Titles referring simply to "The Family" were coded as 451102. "Community Service," as a title without qualifiers, was coded 440201.
- 190401 OLD** Family/Consumer Management: General
- 190402 OLD** HE: Consumer Science, Consumer Economics
- 190499 OLD** Family/Consumer Management: Other
- 190501 OLD** HE: Food Science/Nutrition: General
- The word, "nutrition," must be in the title. This is not true of 200108.
- 190502 OLD** HE: Food & Food Sciences, Experimental Foods
- Student major is a key. Titles referring to "regulatory and quality standards" would be placed under 020301 if the student were an Agriculture major of any kind.
- 190503 OLD** Dietetics/Human Nutritional Services, Diet Therapy, Diet and Disease, Nutrition and Health, Nutrition Care
- 190504 RES** HE: Human Nutrition, Principles/Elements/Essentials of. . . , Food & Nutrition, Child Nutrition, Community Nutrition
- 190599 OLD** HE: Food Science/Nutrition: Other
- 190601 OLD** HE: Human Environment & Housing: General, Human Shelter
- 190602 MOD** Household Equipment & Furniture
- General titles on "interiors and furnishings" were classified under 200110. The keywords

CIP Code

"decorative" or "decorating" placed the title in 200505. "Interior design" titles were usually placed under 040501.

- 190603 OLD HE: Housing, Family Housing, the House, Housing Costs
- Student major is a key to assignment here as "housing" titles can be Architecture, Urban Design, and/or other categories in the 04 series.
- 190699 DEL HE: Human Environment & Housing: Other
- Did not meet threshold criterion.
- 190701 OLD HE: Individual & Family Development: General
- Titles referring to "Adolescent Development" or "Adult Development" usually belong in 420701. If less than three credits, we judged them to be personal service and development course, and placed them in either the 35 or 37 series.
- 190703 MOD HE: Family Counseling/Stress/Crises, Parent Counseling
- Student major (where known) should determine the assignment. If Social Work (4407) or Human Services (1704), the course does not belong here.
- 190704 OLD HE: Family Relations
- Also "Marriage and Family Relations," but not "Marriage and Family" (451102).
- 190705 OLD HE: Gerontological Services
- See comments under 190703.
- 190799 OLD HE: Individual & Family Development: Other
- 190901 OLD Textiles & Clothing: General, Culture/Society and Dress, Dress and Human Behavior
- But the keyword, "consumer," placed a textile title in 200103.
- 190902 MOD Fashion Design/Analysis/Planning/Theories/History
- But titles with reference to "tailoring" were

CIP Code

placed under 200305.

190904 OLD

Textile Science, Textile Fibers, Textile Testing/Evaluation, Fabric Studies

Student major is a key to the assignment of textile science and technology titles. An Engineering or Engineering Technology major will place the title in the 14 or 15 series.

190999 OLD

Textiles & Clothing: Other

199999 OLD

Home Economics: Other

200101 OLD

VHE: Consumer/Homemaking Education: General

200102 OLD

VHE: Child Development, Care, Guidance

Most of the Child Development (CD) titles are here, but not Child & Adolescent Devel. (420701), Child Welfare (440701), Child & Family (190701), Exceptional Child (131001), and Early Childhood (most likely an education course, 131204).

200103 MOD

VHE: Clothing & Textiles, Clothing Selection, Ready-to-Wear, Textiles for the Consumer

But all clothing "construction" titles were coded under 200303.

200104 OLD

VHE: Consumer Education

At the postsecondary level, this is most likely a personal service and development course. It was difficult to determine the placement of such titles as "Consumer Protection" or "Consumer Credit" given the existence of the 1904 series.

200105 DEL

VHE: Exploratory Homemaking

A high school course.

200106 OLD

VHE: Family/Individual Health, Consumer Health

The keywords are "family" or "consumer." Without them, the titles should be coded 340101.

CIP Code

- 200107 OLD VHE: Family Living/Parenthood, Expectant Parents, Parent Education, Parent Co-Op
- These are personal service courses designed to assist individuals, as opposed to academic courses in which problems, e.g. of "parenting" are studied. For the latter, see 190701.
- 200108 OLD VHE: Food & Nutrition, Family Food, Family Meal Management, Family Nutrition, Food Selection and Preparation
- The keyword in this context is "family."
- 200109 OLD VHE: Home Management, Housekeeping, Housekeeping Management/Supervision
- 200110 OLD VHE: Housing/Furnishings/Equipment
- Titles included "Refinishing Your Furniture" and "Planning Your Kitchen," i.e. "how-to" courses that, depending on the number of credits involved, also could be placed in the 3601 series.
- 200199 DEL VHE: Consumer and Homemaking Education: Other
- An unnecessary category.
- 200201 OLD VHE: Child Care Services: General
- 200202 DEL VHE: Child Care Aide/Assisting
- Did not meet threshold criterion.
- 200203 OLD VHE: Child Care Management
- 200204 DEL VHE: Foster Care/Family Care
- Did not meet threshold criterion.
- 200299 OLD VHE: Child Care Services: Other
- 200301 OLD VHE: Clothing Production & Services: General
- 200302 DEL VHE: Clothing Maintenance Aide
- Did not meet threshold criterion.

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200303 MOD Garment/Apparel Construction, Patternmaking,
Sewing, Stitching

All clothing construction titles referring to
specific types of clothing, e.g. children's
wear, coats, knitwear, etc. were coded here.

200304 DEL Custom Apparel/Garment Seamstress

Did not meet threshold criterion.

200305 OLD Custom Tailoring/Fitting/Alteration

200306 OLD Fashion/Fabric Coordination

200308 DEL Wedding/Specialty Consultation

Did not meet threshold criterion.

200399 DEL Clothing, Apparel & Textiles Services: Other

Did not meet threshold criterion.

200401 OLD Food Production/Management/Services: General

200402 OLD Baking

200403 OLD Chef/Cook

200404 DEL Dietetic Aide/Assisting

Did not meet threshold criterion.

200405 DEL Food Catering

Combined with 200406.

200406 MOD Food Service & Catering

Included all titles referring to "operations" and
"management" except those that explicitly referred
to restaurants (060701).

200408 DEL School Food Service

Did not meet threshold criterion. Residuals
combined with 200406.

200499 OLD Food Production/Management/Services: Other

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- 200501 DEL Home Furnishings & Equipment Services: General
The general titles here belonged under 200110.
The residuals did not meet threshold criterion.
- 200502 DEL Custom Drapery and Window Treatment
Did not meet threshold criterion.
- 200503 DEL Custom Slipcovering and Upholstering
Did not meet threshold criterion. See 4803
series for "upholstering" titles.
- 200504 OLD Floral Design
- 200505 OLD Home/Interior Decorating
- 200506 DEL Home Furnishings Aide
Did not meet threshold criterion.
- 200507 DEL Home Service Assisting
Did not meet threshold criterion.
- 200599 DEL Home Furnishings & Equipment Services: Other
Did not meet threshold criterion.
- 2006 DEL Institutional Home Management & Supporting
Services
Entire section, consisting of seven codes,
covering custodial services, executive
housekeeping, companion to the aged, etc. was
deleted. None of the titles met the threshold
criterion.
- 209999 OLD Vocational Home Economics: Other

INDUSTRIAL ARTS (21)

Industrial Arts is a section of the CIP very much like Vocational Home Economics. That is, it was originally designed to describe secondary school courses. But in this case, all of the codes and titles proved viable, principally because these courses are offered and frequently taken in Area Vocational/Technical Institutes (AVTIs), which are postsecondary institutions. They

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are also courses taken by future Industrial Arts teachers, but, even as such, they were coded here and not under Education.

Many titles found under IA are literally identical to titles found elsewhere, e.g. "Construction Methods" (151001) or "Structures" (150201). Student major and institutional type must be used to determine the proper assignment.

210101 OLD Industrial Arts: General

210102 OLD IA: Construction

210103 OLD IA: Drafting and Design

These are not specialized occupational drafting courses (4801) series, nor commercial art/design (5004).

210104 OLD IA: Electricity/Electronics

210105 OLD IA: Energy, Power & Transportation

210106 MOD IA: Basic Graphics/Mechanical Drawing

These titles are clearly distinguished from Engineering Graphics (145001), or design graphics (5004 series), etc. They are basic.

210107 OLD IA: Manufacturing/Materials

210199 DEL Industrial Arts: Other

All titles sorted into other categories.

LAW (22)

This section was reconstructed along three lines. First, to ensure that the classic curriculum of students seeking LLBs/JDs in law schools was gathered here, as opposed to being scattered elsewhere. Second, to exclude courses dealing with the law taught in the context of either business or criminal justice (read "Police Academy") programs. For example, "business law," "legal environment for business," etc., courses were assigned to a new category, 060102. On the other hand, courses in "commercial transactions" taught in law schools were kept here. The same pattern was followed for titles in "criminal procedure," for example. Third, to separate, as much as possible, courses dealing with legal aspects of specific fields and usually taught within those fields. With few exceptions, these were placed in

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220199, "Law: Other." Institutional type, student degree level, and student major were all used as criteria in the assignment of specific titles. For example, a course in "constitutional law" taken by a political science major in a comprehensive college was assigned the code, 451003 ("Constitutional Law, Constitutional/Judicial History") under Political Science.

220101 OLD Law [includes Torts, Contracts, Labor Law, International Law, Administrative Law, Trusts, Wills, Family Law, Domestic Relations, Agency, Estates, Property, Litigation, Moot Court, Appellate Advocacy, Civil Procedure, Municipal Corporations, Legal Clinic, Patent Law, etc.]

This category was reserved for the standard law school curriculum.

220102 DEL Pre-Law

Code does not apply to courses, rather programs.

220103 MOD Legal Assisting, Research, Writing; Legal Bibliography, Para-legal

220199 OLD Law: Other

A miscellany of titles wound up in this category, including "Law and Society," "Law for Junior Officers" (Military Science context), Medical/Legal Problems," "Education and the Law," "Pharmaceutical Jurisprudence," etc.

ENGLISH/LITERATURE IN ENGLISH (formerly "Letters"), (23)

The recoding of English/Literature in English courses involved establishing decision rules for different levels of writing courses, for sorting literature courses, for distinguishing literature in translation from literature in the original language, and for delineating borders between English and Communications, Teacher Education, and other fields involving communication/language skills.

In the process, three new 4-digit series were created: 2301 for general literature/genre topics; 2320 for remedial language skills courses; and 2390 for special topics in literature.

The 2301 series categories were used for general titles, along with titles covering groups of authors or genre/period

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combinations which could not be classified under "comparative," "English," or "American" literature (e.g. "Short Fiction of the 19th Century," "Yeats and Stevens"). If the title specified "English Fiction of the 19th Century," then the course was classified as 230801; "Cummings and Stevens" would be American Literature, 230701. "Walker and Baldwin" would be Afro-American Literature, 230702. The potential for idiosyncratic judgment calls is high here. For example, "Poetry of the 16th Century" has to be English Lit (230801) because American Lit did not exist in the 16th Century. "Poetry of the Romantic Period" was also classified under 230801, even though a course with that title might include some works by American authors.

The 2320 series was used to cover basic skills and developmental writing, remedial reading and reading improvement, and basic speech (see commentary on the 09 series with respect to speech).

Course titles referring to "Children's Literature" or "Adolescent Literature" are not classified as English courses: they belong in Education under 131323.

- 230101 MOD Literature: General/Introduction to, World Literature, Literary Masterpieces
- 230102 NEW Poetry: General/Introduction to, Epic, Lyric, Narrative Poetry
- 230103 NEW Fiction: General/Introduction to, Short Story, Short Fiction, Novels
- 230104 NEW Drama: General/Introduction to
- The category covers drama as literature. It does not include theatre arts titles such as "acting," "directing," etc. These are covered in 500501. Nor does it cover "history of the theatre" and "theatre criticism" courses. These are covered in 500502.
- 230105 NEW Non-Fiction Prose, Biography, Essays etc.
- But a title such as "Expository Essay" is most probably a writing course, 230401.
- 230201 OLD Classical Literature, Greek/Roman Literature (Drama, Poetry) in Translation, [Specific Authors] e.g. Aeschylus, Virgil, Plautus; [Specific Works] e.g. The Odyssey, the Orestia, Classical Mythology

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The works of classical historians, e.g. Herodotus, Pliny, were not coded here, rather under 450802, "Ancient History."

230202 NEW The Bible as Literature, Poetry of the Old Testament, Life and Language of the Bible, etc., Bible History and Literature

This category is distinguished from Bible studies in a theological context (390201) and various Bible titles under the Religion series (3802). The titles covered here were distinctly secular. Institutional type (Carnegie code) was used as an additional guideline. A Bible course in a Carnegie Code 51 institution (seminary, bible college) is not a "Bible as literature" course.

230301 OLD Comparative Literature: European Lit. in Translation, Continental Literature

This is a tricky category. If the student is majoring in a foreign language, the chances are high that a course in that literature (e.g. 19th Century French Fiction) or the work of a single author (e.g. Goethe) will not be in translation, hence should be classified under the appropriate code in the 16 series. But the student's major is not always the best guide.

Typical titles here include Renaissance Lit., Continental Fiction, Romanticism, Medieval Epic, Dante/Chaucer/Cervantes (and similar combinations)

230302 NEW Comparative Literature: Non-Western, Third World Literature in Translation

Here, too, major plays a role in the assignment.

230401 OLD Freshman Composition, Freshman English, College English, Composition & Literature, Composition & Rhetoric, Reading & Composition, Exposition

This is the standard freshman composition course. One tricky title often coded here is "Composition and Conversation." Chances are high that the course is a foreign language course. Entire student records had to be examined to make that determination.

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- 230403** NEW Spoken/Written English; Advanced Grammar
- The titles here indicate a level of freshman composition that is somewhat remedial. The emphasis is on "correct usage."
- 230501** OLD Creative Writing, Writing Poetry/Fiction/Drama
- Writing for television, film, radio, etc., is not covered here, rather in 090701.
- 230601** OLD Linguistics: General, Introduction to, Generative Grammar, Semantics, Philology, Descriptive Linguistics, Contrastive Linguistics, Dialectology, Phonetics
- This is not Anthropological Linguistics. If the title reads "Linguistics/Language and Culture," the course should be coded 450206.
- 230701** OLD American Literature, American Fiction/Drama/Poetry/Humor/Short Story, American Renaissance, American Realism/Romanticism, Transcendentalism, [individual or groups of authors, e.g. "Poe, Hawthorne, Melville"]
- 230702** NEW Afro-American Literature/Fiction/Drama/Writers
- 230801** OLD English Literature: All Periods, Metaphysical Poets, Romantic Poets, Bloomsbury Group, Anglo-Saxon Epic, Victorian Age, Augustan Age, Jacobean Drama, etc., [individual or groups of authors, e.g. "Chaucer and His Century"]
- 230802** NEW Shakespeare
- 231001** MOD Public Speaking, Debate, Oral Interpretation, Forensics, Parliamentary Procedure, Business & Professional Speaking
- 231002** NEW Voice & Articulation, Diction
- 231101** OLD Technical and Business Writing
- 231201** OLD English as a Second Language
- 231301** NEW Criticism, Literary History, Theory, Research Methods, Bibliography

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- 232001 NEW Remedial English: General; Basic Skills English, Language Skills, Writing Skills, Grammar, Punctuation, Spelling, Developmental English, Elementary Communication
- "Communication Skills" is coded here, not under any 09 (Communication) series category.
- 232002 NEW Basic Reading, Reading Improvement, Reading Skills, Reading Comprehension, Speed Reading
- To be sure, "Speed Reading" isn't necessarily remedial.
- 232003 NEW Remedial/Basic Speech, Basic Oral Communication, Basic Oral Skills, Listening Skills
- 239001 NEW Other Determinable Literature Topics
- Some common examples include Comedy, Satire, Tragedy, Heroism, Science & Lit, Psych & Lit
- 239002 NEW Science Fiction, Fantasy, etc.
- 239003 NEW Folklore, Mythology (Gen.)
- 239004 NEW Literature & Film/Film as Literature
- 239999 MOD Letters: Missing, Indeterminable

LIBERAL/GENERAL STUDIES (24)

In the original CIP system, these categories were created, in effect, to describe the general Associate's degree. They were program categories, not course categories, and best serve their original function. We found many course titles, however, that fit these categories: they did not refer to even the broadest fields of study. A course entitled, "Liberal Arts Physical Science," for example, was classified 400101, not here.

- 240101 OLD Liberal Arts & Sciences
- Covers titles such as Contemporary Issues/Ideas, Freshman (or any class) Colloquium/Seminar, General Lecture Series, General Honors Program, Introduction to Liberal Studies
- 240102 OLD General Studies

CIP Code

240199 DEL Liberal/General Studies: Other
Unnecessary category.

LIBRARY AND ARCHIVAL SCIENCES (25)

Even if the title specified "for the library," such entries as "Storytelling" or "Children's Literature" were classified under 131323 (Reading and Language Arts).

250101 OLD Library/Archival Science: General
250201 OLD Archival Science, Manuscript Collections
250301 DEL Library Assisting
Did not meet threshold criterion.
250401 MOD Library Science, Cataloging, Classification,
Non-Book Materials
250501 OLD Museology
259999 OLD Library/Archival Science: Other

BIOLOGICAL SCIENCES (formerly "Life Sciences") (26)

First, we retitled the "26" series of the CIP, "Biological Sciences," so as to clarify the boundaries between topics covered in traditional arts and sciences courses and those in allied health, health sciences, health professions, and agriculture (animal science and plant science) courses.

Second, our reconstruction of the field deemphasizes the distinction between Botany and Zoology in the original CIP system in favor of a more modern taxonomy.

One of the residual problems in the CIP system is that of accounting for courses under the general rubric of "biopsychology." Our basic decision rules for courses normally taught in a biopsych curriculum included classifying "behavior genetics" under genetics (260615), giving "animal behavior" its own category (260707), making sure that the various neurobiology related titles were classified under "neuroscience" (260608), placing three and four-credit courses in "drugs and behavior" under psychopharmacology (421401), and assigning all other biopsych titles to physiological psychology (421101). This approach may not please all Biology or Psychology departments,

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but remember that, from a national perspective, who teaches what is less important than what is taught.

260101 **OLD** General Biology, Introductory Biology, Biosciences Survey, Biology: Zoo + Bot

260102 **NEW** Human Biology, Human Ecology

These courses are sometimes taught in Anthropology departments, and often presented in an interdisciplinary framework.

260201 **MOD** Biochemistry

The original category also included Biophysics.

260202 **NEW** Biophysics, Biomechanics

260301 **OLD** Botany: General, Introduction; Biology of Plants, Seed Plants, Vascular/Non-Vascular Plants

260302 **DEL** Bacteriology (code changed to 260502)

This is a case in which the category was misplaced in the CIP system. Bacteriology is more allied with Microbiology (260501) than with Botany, hence was moved from the Botany (2603) subseries.

260304 **DEL** Plant Genetics

All genetics courses (molecular, plant, human, animal, etc.) are now combined in a distinct "specialized area" category (260615). Applied Plant Genetics courses originally classified here were moved to Agronomy (020402).

260305 **OLD** Plant Pathology: General

260307 **OLD** Plant Physiology

260308 **NEW** Plant Morphology, Plant Growth & Development

260310 **NEW** Plant Taxonomy, Plant Diversity, Plant Systematics
Plant Kingdom

260399 **OLD** Botany: Other, Indeterminable

260401 **OLD** Cell Biology

260402 **OLD** Molecular Biology

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260499 DEL Cell and Molecular Biology: Other

Unnecessary category.

260501 OLD Microbiology

Most Electron Microscopy titles in 4-year colleges were placed here. The exceptions (along with Microscopy titles in 2-year colleges) were titles such as "Applied Microbiology and Microscopy," assigned to 170311 (Microbiology Technology under Allied Health).

260502 NEW Bacteriology, Virology (code changed from 260302)

260601 MOD Anatomy: Plant and Animal, Microanatomy, Neuroanatomy, etc.

260602 OLD Biometrics and Biostatistics

260603 MOD Ecology, Population Biology, Bioecosystems, Plant Ecology, Environmental Biology, Aerobiosis

260604 MOD Embryology, Developmental Biology

260605 OLD Endocrinology

260606 OLD Histology, Cytology

260607 MOD Aquatic Biology, Marine Biology, Limnology, Aquatic Plants, etc.

Originally, this category was confined to Marine Biology.

260608 OLD Neurosciences, Neurobiology, Neurophysiology, Brain and Behavior

Many of these courses in the NLS/PETS with the simple title, "Neuroscience," were offered in health sciences centers, hence might have been classified under Clinical Health Sciences (1802).

260609 DEL Nutritional Sciences

Most of the titles originally classified here were human nutrition and nutritional services courses that properly belong in the "1905" subsection of Home Economics.

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- 260610** **OLD** Parasitology
- Course titles dealing with plant parasites were moved to Agriculture: Plant Sciences.
- 260611** **DEL** Radiobiology
- Nearly all the course titles originally coded here were radiology/radiological technology courses that properly belong in Allied Health (170209).
- 260612** **OLD** Toxicology
- 260613** **NEW** Evolution
- 260614** **NEW** Field Biology, Field Natural History, Field Botany
- In some ways, all "field" courses are methods courses, and can be grouped together. We included all the local/state/regional flora and fauna courses in this category.
- 260615** **NEW** Genetics, Molecular Genetics, Plant Genetics, Human Genetics, Behavior Genetics
- 260699** **OLD** Miscellaneous Specialized Areas of Life Sciences: Other
- 260701** **OLD** Zoology: General, Introduction
- 260702** **OLD** Entomology
- 260703** **DEL** Genetics: Human and Animal (see 260615)
- 260704** **OLD** Pathology: Human and Animal
- But not if taught in a medical school. See comments for 180204 and 181018.
- 260705** **OLD** Pharmacology: Human and Animal
- This category does not include pharmacology courses taught in schools of pharmacy. Those courses are classified as Pharmacy (181401).
- 260706** **OLD** Physiology: Human and Animal
- 260707** **NEW** Animal Behavior/Language/Communication, Ethology

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260708 NEW Ornithology

Of all the traditional subdivisions of Zoology, this was the only new entry in our version of the CIP because it was the only subfield with enough instances of course-taking to cross the threshold.

260799 OLD Zoology: Other

260801 NEW Anatomy and Physiology, Applied Anatomy, Applied Physiology (service course)

260802 NEW Plants and the Environment, Plants & Civilization, Plants and Man

This is not a "service course" in the same sense as others in the 2608 series, i.e. it is not a requirement of other majors. Rather, it is a "babified" version of Botany, and the external rating team did not want it included in the 2603 series.

260803 NEW Pathophysiology, Introduction to Disease (service course)

260804 NEW Organic Biochemistry, Physiological Chemistry, Human Biochemistry (service course)

260805 NEW Human Growth and Development

This course, like 260802, is also less of a "service course" than others in this category. In the NLS/PETS data base, courses with this title were also classified in Anthropology, Home Economics, and Psychology. But a catalogue check demonstrated that they were most likely to be a second course in a "Human Biology" sequence, and most likely to be taught in Biology departments.

269999 OLD Life Sciences: Other, Indeterminable

MATHEMATICS (27)

Basically, the only Mathematics codes in the 1985 version of the CIP that remained untouched by our reconstruction were those for Statistics (270501) and Mathematics: Other (279999). We threw out the entire CIP classification system (which had only 6

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codes), and set the codes so that all categories coded 2701 were unquestionably pre-collegiate mathematics, and that all categories coded 2702 were college-level but pre-calculus math.

270101 MOD Pre-Collegiate Math: General, Basic Concepts of Math, Elementary/Intro Math, Foundations of Math

270102 NEW Arithmetic, Computation

270103 NEW Pre-Collegiate Algebra

270104 NEW Pre-Collegiate Geometry, Plane Geometry, Descriptive Geometry

270199 NEW Developmental Math, Other Pre-Collegiate Math

270201 NEW Introduction to College-Level Math, Core Math, Math as Liberal Art, Comprehensive Math, Math for Behavioral/Economic/Social Science

"270201" was originally applied to "Actuarial Science. There was only one instance of this or any related course title in the NLS/PETS. In our scheme, Actuarial Science is included in 270701.

270202 NEW Finite Math, Discrete Math, Computer Math, Data Processing Math

270203 NEW College Algebra

270204 NEW Pre-Calculus, Analytic Geometry, etc.

270301 DEL Applied Math

This was too amorphous a category for classifying courses, since it applied to everything from "Shop Math" in vocational schools to advanced Engineering math.

270401 DEL Pure Mathematics

It was hard to tell what the original authors of the CIP system had in mind here. The original coders of the NLS/PETS didn't seem to know, either.

270501 OLD Statistics, Probability and Statistics, Descriptive Statistics, Inferential Statistics, Stochastic Models

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This category is confined to statistics taught in mathematics departments. Other codes in the CIP, both old and new, account for statistics taught elsewhere, e.g. 061301 (Business Statistics), 450641 (Economic Statistics), 458001 (Social Statistics), 421501 (Quantitative Psychology), 260602 (Biostatistics), and 147001 (Engineering Statistics).

- 270601 NEW Calculus, Linear Algebra
- 270602 NEW Calculus for Life Sciences/Economics/Business
- 270701 NEW Advanced Mathematics Topics, e.g. Abstract Algebra, Analysis/Advanced Analysis, Number Theory, Combinatorics, Topology, Game Theory, Modern Algebra/Algebraic Structures, Real Analysis, Complex Variables
- 270801 NEW Technical/Vocational Math
- 270901 NEW Business Math: Pre-Collegiate, Business Computations

Most courses in this group are really clerical math and bookkeeping math courses, hence arithmetic based.

- 270902 NEW Business Math: Collegiate, Math for Finance, Math for Business/Economics

These courses are obviously different from those in 270901. Some could involve calculus, but that was not clear from the titles.

- 271001 NEW Number Systems, Number Structures, Mathematical Structures

These courses are offered by mathematics departments to Teacher Education majors, yet are not classifiable as "Mathematics Education" (131311). Note that "Number Theory" is 270701, not here.

- 279999 OLD Mathematics: Other, Indeterminable

Under the original (1984) coding, 70% of all the math course entries were classified here because the other 5 math codes could not account for them. Under our revised system, only 7% of the math course entries are coded here.

CIP Code

MILITARY SCIENCES and TECHNOLOGIES (28 and 29)

The courses classified here are usually the generic cadet training courses in the service academies and ROTC programs. Some of the major titles used across all of the services include "Basic Cadet Training," "U.S. Military Forces," "Operations and Tactics," "National Security," Defense Policy/Establishment/Strategy/Organization, and "The Professional Officer."

280101 MOD Air Force, Aerospace Studies, Growth/Development of Air Power

The previous category title was "Aerospace Science." This was confusing. If a course title refers to "Ground School" or "Pilot Training," unless the Air Force is specifically named in the title, it is classified under 490102.

280201 OLD Coast Guard Science

280301 MOD Military Science, Combined Arms Operations, Small Unit Tactics

Other titles included "First (Second) Year Basic," which is not a computer programming course, "Command Comm," which is not the name of a software file (the title was also found under 280101), and "Rangers."

280401 MOD Naval Science, Navigation (and Celestial Navigation), Sea Power, Ship Systems, Naval Organization/Management, Central Systems

"Naval Electronics" was classified here and not under Naval Engineering.

280501 DEL Maritime Science (Merchant Marine)

No cases.

289999 OLD Military Science: Indeterminable

290101 OLD Military Technologies: All

299999 DEL Military Technologies: Other

Unnecessary category. No cases.

CIP Code

INTER/MULTI-DISCIPLINARY (30)

The CIP system contains a separate section (the "30" series) for interdisciplinary programs. Unfortunately, the original version was somewhat stilted in its conception, and missed a number of key field developments of the 1970s, including Environmental Sciences/Studies and Science, Technology and Society (STS) programs and courses. In addition to reconstructing and filling in this section, we created new codes for the Philosophy of Science under Philosophy (the "3801" series) and the History of Science under History (the "4508" series).

300101 MOD General Science, Natural Science, Science Fundamentals, Basic Science, Integrated Science

Some of these may be interdisciplinary, but most are probably broad, multidisciplinary introductions. The category was originally titled, "Biological and Physical Sciences."

300102 NEW General Laboratory, Lab Techniques, Instrumentation

Again, these courses are not so much inter- or multi-disciplinary as unanchored to any particular science, type of science (biological or physical), or engineering.

300103 NEW Introduction to Technology, Technological Studies, Applied Science

These are not Engineering Technology courses that would otherwise be classified as 159001.

300201 OLD Clinical Pastoral Care

300301 DEL Engineering and Other Disciplines

Most of the titles we found classified here were more appropriately classified under the various Engineering codes themselves, e.g. Engineering Graphics (145001), Engineering Physics (141201), Engineering Thermodynamics (141901)

300401 MOD Humanities: General, Survey

Also covers titles such as Great Books, Great Ideas, Philosophy & Literature

CIP Code

300402 NEW Humanities & Social Sciences

300403 NEW Humanities and Arts

Combinations such as Literature and Art, or Music/History/Literature are covered here.

300404 NEW Popular Culture

Title here referred explicitly to mass culture and/or media such as comic books, broadsides, television shows, etc.

300501 MOD Peace Studies, Conflict Resolution/Management

300601 DEL Systems Science

The original (1984) coders put anything with the word "systems" here, including courses in architecture, business, biology, ecology, energy, economics, geology, heredity, religion, sociology, and law. When these were sorted to where they belonged, there was nothing left.

300701 OLD Women's Studies

The decision rules for this code depended on the principal disciplinary context. For example, a literature course such as "Women Novelists of the 19th Century" was classified under Fiction (230103), whereas a course such as "Women as Victims in Modern Literature" was classified here. In the former case, women were the producers of the artifacts; in the latter, women were the subject. Too, a course with a generic title such as "The Psychology of Gender" was classified here, but a course focusing on women within a specific subfield of psychology, e.g. "Issues in Therapy for Women" was classified under Clinical Psychology (420201).

300801 DEL Mathematics and Computer Science

This code was created in the 1985 version of the CIP and hence was not used in the 1984 coding. We accounted for the topics in other ways: Numerical Analysis/Methods, etc. in Computer Science (110801) and Computer Mathematics in Math (270202).

CIP Code

300901 DEL Imaging Science

This code was also created in 1985, and hence was not used in the 1984 coding. The field it describes is accounted for, in our scheme, under Computer Science: Advanced Topics (110701).

301001 NEW Future Studies, Futuristics

302001 NFW Science, Technology and Society (STS)

This category includes courses with titles such as "Technology and Civilization," "Scientific Beliefs and Values," "Genetics and Human Values," "Chemistry and Society."

303001 NEW Environmental Science, Environmental Studies, Energy and Environment, Pollution

The titles classified here (those above, and many others) exclude those dealing directly with "conservation" and "regulation" of natural resources, as those titles have their own home in the CIP system (0301 and 0302 under "Renewable Natural Resources").

304001 NEW Sports and Leisure Studies, History of Sports, Philosophy of Sports, Sports and Society, The Economics of Sports

309999 OLD Interdisciplinary Studies: Other

This was not a dumping ground for unclassifiable titles (see 908000). The titles here had to be legitimate, e.g. "Physics and Modern Art," "Science, Mysticism and Myth," "Materials and Civilization," "Modes of Thought," etc.

RECREATION (31)

These are not physical education/leisure activities courses. Rather, they are occupationally-oriented courses preparing individuals for various roles in the recreation industry.

310101 MOD Recreation/Parks: General, Community Recreation, Introduction to Recreation

CIP Code

- 310201 MOD Outdoor Recreat., Camp Counseling, Camp Administration, Campcraft
- 310301 OLD Parks and Recreation Management, Admin. of Recreation, Recreation Program Development
- 310401 MOD Water Recreation/Water Safety, Aquatics Management

In the earlier versions of the CIP system, this code was used to cover titles in Water Resources, including water quality, water resource economics, etc. In this version, those titles are covered under the Renewable Natural Resource section, specifically in 030201.

- 310501 NEW Sports Officiating, Refereeing, Umpiring
- 310601 NEW Recreation Leadership/Supervision
- 310901 NEW Recreation Practicum/Field Experience
- 319999 OLD Recreation/Parks: Other

BASIC SKILLS (31)

In the original CIP system, this category mixed both personal service and tutorial/remedial courses in language skills and math. We removed the remedial courses and placed them in their respective areas (see the 2320 series for remedial language skills and the 2701 series for pre-collegiate math). The residual categories cover credit-bearing (usually less than three credits) supportive service and counseling activities.

- 320101 OLD Basic Skills: General
- 320102 OLD Academic/Intellectual Skills

These are tutorials in how to study.

- 320103 DEL Communications Skills

Titles under this code were reclassified under either the 09 or 23 series.

CIP Code

- 320104 DEL Computational Skills
- Titles under this code were reclassified under Mathematics, usually in the 2701 series.
- 320105 OLD Job Seeking/Changing Skills, Job Preparation, Job Interview Technique, Career Decision, Career Counseling/Planning
- 320106 DEL Motor Skills
- The few titles originally classified here belonged under Exercise Physiology (170804), Physical Therapy (170813), etc.
- 320107 MOD Career Exploration/Orientation, Career Information, Careers in "X [Health, Business, etc.]," Occupational Information
- 320108 NEW Personal Typing
- Covers titles such as Basic Keyboard, Beginners Typing, College Typing. If student major is 07, i.e. Office Occupations, the typing titles should not be coded here, rather under 070702.
- 320199 DEL Basic Skills: Other
- Unnecessary category.

CITIZENSHIP/CIVIC ACTIVITIES (33)

This category of the original CIP system was designed for high school curricula. None of the five course categories, e.g., "American Citizenship" or "Civic Appreciation," turns up in postsecondary education. The entire section failed to yield one valid case, hence was dropped.

HEALTH-RELATED ACTIVITIES (34)

This section covers self-help, health information, and self-improvement courses, not academic courses. Some of the categories, e.g. Aerobics/Jogging or Life-Saving might have been placed in the 36 series, but they could be better justified here as basic, personal physical survival/health activities, rather than sports/physical education. "Adapted Physical Education," however, was placed here, on the grounds that it is a special, personal service for handicapped students.

C&P Code

340101 MOD Health & Physical Practices: Gen., Health & Hygiene, Personal Health, Biofeedback, Health and Safety

But the word, "health," in combination with references to school, youth, children, etc. places the course under 131307. Likewise, the title, "Personal and Community Health" should be coded as 170402.

340102 MOD Sex & Birth-Related Health Practices

340103 MOD Mental Hygiene

340104 MOD Aerobics, Jogging, Body-Building, Conditioning

340105 NEW First Aid, Life-Saving, First Aid & Safety/Self-Help etc.

340106 NEW Drug/Alcohol Abuse Prevention, Drug Awareness, Habit Forming Substances, Drug Education, etc.

To be distinguished from 170401, a course under which future human service workers are trained as special counselors on drug/alcohol abuse matters. This, on the other hand, is a basic student service information course.

340107 NEW Adapted Physical Education

To be distinguished from "Adaptive" PE (171003) under which future recreation workers are trained to design and provide activities for handicapped individuals.

340199 DEL Health-Related Activities: Other

Unnecessary category.

INTERPERSONAL SKILLS (35)

These are personal service and development courses, not academic social science courses. The faculty review team in Psychology, in particular, insisted that all "Applied Psychology"-type titles be placed here and not in the 42 series.

350101 MOD Interpersonal Skills/Relations, Applied Psychology, Personal and Social Adjustment

CIP Code

If the course title contains the phrase, "Psychology of . . .," it belongs in 421001, not here. Interpersonal/Small Group Communication courses belong in 091001, not here.

350102 MOD Relations: Love, Sex, Job; Sexual Awareness/Relationships

But "Human Relations in Business" was classified as 060601, and "Human Sexual Behavior" as 451003.

350103 DEL Perception of Others

Confusing category. The titles belonged in 350101 or 350102.

350104 MOD Assertiveness, Leadership, Assertiveness Training, Effective Leadership, Personal Effectiveness

340199 DEL Interpersonal Skills: Other

Unnecessary category.

LEISURE AND RECREATIONAL ACTIVITIES (36)

The major challenge of reconstruction in this section was to disaggregate the huge (over 26,000 cases in the original course file of the NLS/PETS) category of Physical Education Activities (360108) in ways helpful to other analyses. All the new categories in the 36 series, as well as some in the 34 series, are products of this disaggregation. To distinguish a Physical Education Activity course (36) from a Physical Education course to prepare a student for teacher certification (131314) from a Physical Education/Recreation course to prepare a student for non-school-based work in the leisure service industry (1710 series) involved reference to student major, number of credits in the course, and (less often) institutional type.

360101 OLD Leisure & Recreational Activities: Gen

360102 OLD Leisure & Recreational Crafts

360103 OLD Games

360104 DEL Hobbies

Did not meet threshold criterion.

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- 360105 DEL** Housing/Home Maintenance
- Did not meet threshold criterion. Titles moved to 200109 (under Vocational Home Economics).
- 360106 DEL** Nature Appreciation
- Did not meet threshold criterion.
- 360107 DEL** Pet Care.
- Did not meet threshold criterion.
- 360108 OLD** Physical Education Activities, Intramural Sports, Individual Sports, Team Sports, [Any sport named individually or in combination, and without the words, "varsity," "intercollegiate," or "team practice"]
- One major problem here is with dance: ballet, square, modern, jazz, ballroom, etc. As a rule of thumb, square dancing, folk dancing, and ballroom were coded here. Ballet, modern, and jazz dancing were coded under 500301. But the latter assignments were also conditioned by student major.
- 360109 DEL** Travel
- Did not meet threshold criterion. Titles belonged under 0811 series.
- 360110 NEW** Self-Defense, Karate, Judo, etc.
- 360111 NEW** Equestrian Activities, Riding, Equitation, Dressage
- 360112 NEW** Yoga, Hatha Yoga, Meditation
- 360113 NEW** Scuba/Skin Diving
- 360114 NEW** Fishing, Angling, Fly-Casting
- 360115 NEW** Riflery, Pistol, etc. (Non-Military)
- 360201 NEW** Varsity Athletics: Major Sports, i.e. Football, Basketball; Team Practice/Football or Basketball; Intercollegiate Sports: Football/Basketball

CIP Code

360202 NEW Varsity Athletics: Other Sports; Team Practice..
Intercollegiate. . .etc.

360199 OLD Recreational/Leisure Activities: Other

PERSONAL AWARENESS (37)

370101 MOD Personal/Self-Awareness, Human Potential, Personal
Growth, Self-Appraisal, Self-Development/Image

370102 OLD Coping Skills, Daily Living, Stress, Stress
Management

370103 OLD Personal Decision-Making, Personal Goals and
Objectives, Life Planning

370104 MOD Personal Appearance, Charm, Poise, etc.

In programs involving training for models,
flight attendants, and secretaries, these
courses are more than personal service and
development--they are required.

370105 OLD Personal Values/Attitudes/Life-Styles

370199 DEL Personal Awareness: Other

Unnecessary category.

PHILOSOPHY (3801)

In the original CIP taxonomy, Philosophy was a unitary field
code. The disaggregation was fairly straightforward: a set of
codes for the generic divisions of the field (Ethics, Aesthetics,
Metaphysics, etc.); another set for the history of philosophy and
surveys of philosophy by historical period; and a third set for
miscellaneous but commonly taught topics.

Many titles in the humanities, art history, history, and some
other social sciences, require coders know the names of the
leading figures whose works are studied. In philosophy, as in
those other fields, these names are too numerous to list here.

Not all course titles with the word "philosophy" belong in the 38
series. "The Philosophy of Sport," for example, was placed under
304001, an interdisciplinary code for "Sports and Leisure
Studies." "Political Philosophy/Philosophy of Politics" is under

CIP Code

Political Science, along with political theory and ideology titles (451004).

- 380101 MOD Intro. Philosophy, Basic Philosophical Problems, Philosophical Inquiry, Principles of, etc.
- 380102 NEW Ethics, Moral Philosophy, Applied Ethics, Ethics in Business (or Law, Medicine, etc.), Moral Issues/Problems
- Note that we treated the applied ethics courses under Philosophy and not under the professional fields.
- 380103 NEW Logic, Formal Reasoning, Deductive Logic, Logic and Methodology
- Some analogous titles may be found under Math or Computer Science.
- 380104 NEW Aesthetics, Philosophy of Art
- 380105 NEW Metaphysics, Epistemology, Philosophy of Knowledge, Being and Knowing, Knowledge & Reality
- 380106 NEW Philosophy of Language, Ordinary Language Phil
- 380110 NEW History of Philosophy: General
- 380111 NEW Ancient & Medieval Phil, Pre-Socratic Philosophy
- 380112 NEW Philosophy: Renaiss. through 19th C., Rationalism, Empiricism, Transcendental Philosophy
- 380113 NEW Contemporary Philosophy: Analytic Philosophy, Existentialism, Phenomenology
- 380114 EW Non-Western Philosophy
- 380120 NEW Philosophy of Education
- This is not the "Philosophical Foundations of Ed" title that is covered under 130901. The category is perhaps illustrated by a title such as "Plato's Philosophy of Education."
- 380121 NEW Philosophy of Science, Scientific Inquiry, Scientific Method

CIP Code

380122 NEW Philosophy of Religion

This title is clearly distinguished from "Religious Studies" (3802 series), and Theology (390601). If the title referred to the philosophy of a particular religion, it would not be classified here.

380199 MOD Philosophy: Indeterminable, Missing

RELIGIOUS STUDIES (3802)

We retitled the field (originally "Religion"), and disaggregated a single code, in order to sort more accurately titles that might otherwise have been classified as "Theology." (39 series) The identity of the institution and (sometimes) the student's major were the principal guides to assigning titles. For example, a "Christian Doctrine" course taught in a state university is a Religious Studies course; a course with the same title in a bible college is Theology.

380201 MOD Religion: General, Comparative Topics

380202 NEW Non-Western Religions, Bhuddism, Hinduism, Hindu Texts, Confucius, Taoism, Islam, the Koran

380203 NEW Mormon Texts and History, Book of Mormon, L.D.S. Doctrine

380204 NEW Christianity: All Topics

380205 NEW Judaism: All Topics

380206 NEW Religious Ethics/Morality

389999 OLD Philosophy & Religion: Other

THEOLOGY (39)

Theology is not Religious Studies (3802 series). Most courses classified as Theology are given in either theological seminaries or denominational colleges. The one exception is "Bible Studies." In order to be classified as 230202 (Bible as Literature/History, etc.) the title had to be explicit. Too many Bible Studies titles were generalized, and the generalized titles were placed here.

CIP Code

390101 MOD Biblical Languages: Seminary, New Testament Greek, Ancient Hebrew, etc.

390201 OLD Bible Studies, Sacred Scriptures, Synoptic Gospels, Pentateuch, Johannine Epistles

390301 MOD Missionary Studies, Evangelism

390401 OLD Religious Education

390501 OLD Religious Music

Music history courses on such topics as the Mass, Missa Brevis, Requiem, Sacred Chorales, etc. are classified 500906. Music literature courses referring to sacred forms are classified 500905.

390601 MOD Theological Studies, Apologetics, Eschatology, Homiletics, Liturgy, Sacrament, Talmud, Sermons

390701 NEW Christian Living/Activities, Christian Family, Christian Personal Testimony, etc.

399999 OLD Theology: Other

PHYSICAL SCIENCES (40)

The course categories and coding in the physical sciences were fairly straightforward, and the only major debate and reconstruction took place in Physics. Of the original 28 categories across the entire spectrum of the physical sciences, 9 did not require any recoding whatsoever (i.e. the prima facie evidence of error was less than 10%). And outside of Chemistry and Physics, the only categories that required heavy recoding work were Geology, Oceanography, and Earth Sciences, and all the "99" ("Other") codes.

In Chemistry, the external faculty rating team made minor adjustments. To the seven existing codes, they added but four, and two of these were designed to sort out service courses from General Chemistry.

The case in Physics was somewhat different. Here there was a conscious attempt to distinguish upper-division treatments of major topics, e.g. Mechanics or Electricity & Magnetism, from their treatments in introductory physics courses, as well as to consolidate the various atomic/nuclear physics titles.

CIP Code

400101 OLD Physical Sciences: General, Introduction
400201 MOD Astronomy, Celestial Mechanics, Cosmology
400301 OLD Astrophysics, Space Science, Solar Physics
400401 OLD Atmospheric Sciences, Meteorology

CHEMISTRY (4005)

400501 OLD General Chemistry, College Chemistry, Introduction to Chemistry

Titles including Intro Chemistry "and" Qualitative or Quantitative Analysis were classified here, not in 400502.

400502 MOD Analytical Chemistry, Instrumental Analysis, Chemical Measurements

400503 OLD Inorganic Chemistry

400504 OLD Organic Chemistry

400505 OLD Pharmaceutical Chemistry

This is basically a service course.

400506 OLD Physical Chemistry

400509 NEW Other Determinable Topics in Chemistry

These included Chemical Literature, Environmental Chemistry, Macroscopic Chem, Radiochemistry, and Agricultural Chemistry. It might be possible to split the Chemical Literature titles off, as those courses are often staples of the Chemistry major.

400510 NEW Research, Independent Study in Chemistry

In most other fields of the CIP, the "research" and "independent study" titles are lumped with the "Other" (99) code categories. The faculty rating team here (like that in Psychology) urged a separate category.

400520 NEW Applied Chemistry, Liberal Arts Chemistry

CIP Code

This category, like 260802 in Biological Sciences, was created to split off the unquestionably "babified" versions of the introductory course in the field.

400530 NEW Chemistry for Nurses/Allied Health/Life Sciences (service course)

400599 OLD Chemistry: Indeterminable

GEOLOGY/EARTH SCIENCES (4006 and 4007)

400601 MOD Geology: Introductory, General

We included titles in stratigraphy and sedimentation here unless they were explicitly linked to paleontology (400604), as well as general titles in geomorphology (unless explicitly linked to mineralogy or petrology.

400602 OLD Geochemistry

400603 OLD Geophysics and Seismology

400604 OLD Paleontology

Some (but surprisingly few) of the titles originally classified here belonged in Archaeology (450301).

400605 NEW Mineralogy and Petrology

These two topics were sometimes yoked in the course title and sometimes not. We decided that a single category for both was appropriate.

400699 OLD Geological Sciences: Other

All the field geology titles were placed here, but there were not enough to justify a separate category.

400701 OLD Metallurgy

400702 OLD Oceanography

400703 OLD Earth Science, Earth History, Earth Materials, Earth Physics, Earth Processes, Earth Science-Evolution

CIP Code

400799 OLD Miscellaneous Physical Sciences: Other

PHYSICS (4008)

400801 MOD Physics: General, Introduction

Course titles for General Physics often consist of sets of topics, e.g. "Waves, Optics, Heat, Electricity," or single topics, e.g. "Physics II: Electricity and Magnetism." Titles such as these were assigned to 400801. One of the most difficult tasks for an external faculty rating team was to sort out intermediate and advanced courses in the same areas from those presented in the introductory course. We discuss the decision rules in those cases below (see 400810, 400811, 400813)

400802 MOD Atomic/Molecular Physics, Nuclear Physics, Particle Physics, Radiation Physics, Reactor Physics

This category was expanded to catch titles from codes that had been deleted from the CIP system in 1985, hence had already been used in the 1984 coding. The external faculty rating team decided against reinstating those categories (e.g. Particle Physics) as distinct entities, and for merging 400806 with these and related titles.

400806 DEL Nuclear Physics

See commentary to 400802.

400807 OLD Optics

"Holography" would be placed here unless the student's major was in Fine Arts or Film Arts.

400808 DEL Solid State Physics

Did not meet threshold rule.

400809 NEW Acoustics, Physics of Music

This is often a service course for music and music education majors.

CIP Code

- 400810** NEW Thermal Science, Thermodynamics, Advanced Thermo, Kinetic Theory
- Titles here are clear cases of intermediate/upper division courses in physics, not engineering. If "thermodynamics" was listed with other topics, e.g. "Mechanics and Thermodynamics," the course was classified in 400801.
- 400811** NEW Electricity and Magnetism: Intermediate Course, Electrodynamics, Electrophysics
- To be classified here (as opposed to 400801), the title had to stand alone, and, if a course number was indicated, to be 200 or higher.
- 400812** NEW Modern Physics
- 400813** NEW Mechanics, Classical Mechanics, Analytical Mechanics
- The decision rules adopted here are like those for both 400810 and 400811.
- 400814** NEW Quantum Physics/Theory/Mechanics
- 400899** OLD Physics: Other
- 400901** OLD Planetary Science
- 409999** OLD Physical Sciences: Other, Indeterminable

SCIENCE TECHNOLOGIES (41)

The principal problem in the Science Technologies ("41" series) categories of the CIP was fairly simple. In the NLS/PETS data base, there were precious few instances of titles in these fields, and most of what had been assigned to the 41 Series in 1984 should have been assigned elsewhere. For example, most of the titles assigned to the Biological Technologies (4101) areas belonged in Allied Health, most of those assigned to Physical Science Technologies (4103) belonged with the basic physical sciences themselves, and those assigned to the two Oceanographic Technologies codes (one for biological, the other for physical) belonged in neither.

The result is a very abbreviated section of the CIP, to wit:

CIP Code

- 410101 MOD Biological Technologies: All**
Originally, the category was entitled, "Biological Laboratory Technology." Depending on the student's major, some electron microscopy titles were placed here. If the major were in the Allied Health series, the microscopy titles were classified under 170311.
- 410102 DEL Oceanographic (Biological) Technology**
Did not meet threshold criterion.
- 410199 DEL Biological Technologies: Other**
Did not meet threshold criterion.
- 410201 MOD Nuclear Technologies: All**
Originally, the category was entitled, "Nuclear Materials Handling Technology." We combined all valid 4102 course titles here.
- 410202 DEL Nuclear Power Plant Operation Technology**
See comment for 410201.
- 410203 DEL Nuclear Power Plant Radiation Control Technology**
See comment for 410201.
- 410204 DEL Radiologic (Physical) Technology**
Nearly all the courses originally (1984) coded here belonged in "Radiologic (Medical) Technology" under Allied Health, 170209.
- 410299 DEL Nuclear Technologies: Other**
Unnecessary code.
- 410301 OLD Chemical Technology**
- 410302 DEL Geological Technology**
All course titles originally assigned here belonged elsewhere, e.g. Geology, Geological Engineering.

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- 410303 OLD Metallurgical Technology**
- A number of titles of courses taught in proprietary vocational schools and originally classified as Metallurgical Engineering (142001) were reclassified here.
- 410304 DEL Meteorological Technology**
- All course titles originally assigned here could be reclassified as either Atmospheric Science/Meteorology or Geography.
- 410305 DEL Oceanographic (Physical) Technology**
- These titles were reclassified as Oceanography (400702).
- 410399 DEL Physical Science Technologies: Other**
- Did not meet threshold criterion.
- 419999 DEL Science Technologies: Other**
- Did not meet threshold criterion.

PSYCHOLOGY (42)

The principal task with ostensible titles dealing with human behavior and development was to establish rules that clearly distinguished psychology courses from courses in education, home economics, communications, and, for want of a better term, "personal development and awareness," i.e. personal service applied psychology.

A title such as "Interviewing Techniques" well illustrates this problem. Courses with title were originally coded under communications (09 series), clinical psychology, counseling psychology, social work (4407). Student major was the principal guide to accurate assignment of these titles. Within Psychology, the title was assigned to clinical (420201).

Words such as "behavior," "motivation," "emotion," placed a course under Psychology of Personality (421001) unless modified in ways that classified the "behavior" as explicitly abnormal.

The reader should consult the rules for Educational Psychology titles (130801) and the Applied Psychology/Personal Service series (35 and 37).

CIP Code

- 420101** **OLD** **Psychology: General, Introduction to, Principles, Behavioral Science**
- 420201** **OLD** **Clinical Psychology**
Covers titles in Behavior Control/Management/Modification, Clinical/Group Therapy
- 420301** **MOD** **Cognitive Psychology, Memory, Perception, Consciousness**
- 420401** **DEL** **Community Psychology (combined w/420601)**
- 420501** **DEL** **Comparative Psychology**
Did not meet threshold criterion. Half the titles belonged in Animal Behavior (260707).
- 420601** **MOD** **Counseling Psychology, Community Psychology**
But "Counseling" in combination with "Guidance" in a title placed it under 131101.
- 420701** **OLD** **Developmental Psych, Child Psych, Child Study, Child Behavior, Childhood and Adolescence, Adolescent Psych, Psychology of Aging, Human Development, Principles of Development**
"Child Development" titles were classified under 200102. If the word, "Family," appeared in the title, as in "Human and Family Development," the course was classified under Home Economics, 190701. "Human Growth and Development" titles were usually classified under the Biology service courses, 260805.
- 420801** **MOD** **Experimental Psych, Research Methods, Research Design**
- 420901** **OLD** **Industrial Psychology, Organizational Psychology.**
But "Managerial Psychology" and "Organizational Processes" titles were placed under 061501 in the Business Administration series.
- 421001** **MOD** **Personality Psychology**
Includes a host of titles, e.g. Motivation, Emotion, Aggression, Dreams, Human Behavior, Psychology of Adjustment, Analysis of Behavior,

CIP Code

Personality Development/Dynamics/Theory

- 421002 NEW Abnormal Psychology, Psychology of Deviance
Disorganized Personality, Behavioral Pathology,
Mental Retardation
- 421003 NEW Human Sexuality, Human Sexual Behavior

As distinguished from "sexual relations" under
350102.
- 421101 MOD Physiological Psych, Biopsychology, Psychobiology
Biological Bases of Behavior, Sensation
- 421201 OLD Psycholinguistics, Psychology and Language
- 421301 OLD Psychometrics, Psychological Testing
- 421401 OLD Psychopharmacology, Drugs and Behavior
- 421501 OLD Quantitative Psychology, Psychological Statistics
- 421601 MOD Social Psychology, Environmental Psychology

Covers titles such as Mass Behavior, Group
Interaction, Group Dynamics. "Collective
Behavior," however, is usually a Sociology
course, and has its own code, 451106. "Applied
Psychology," and Interpersonal/Human Relations
courses are personal service, and were coded
350101.
- 422001 NEW History of Psychology, Philosophy of Psychology
- 429010 NEW Psychology Field Work, Internships
- 429020 NEW Psychology Seminars, Readings, Colloquia
- 429999 MOD Psychology: Missing, Indeterminable

PROTECTIVE SERVICES (43)

The 1970s saw significant amounts of financial support for students to attend college under the Law Enforcement Assistance Act. Basically, LEAA provided for the collegiate education of police officers. The number of programs in Criminal Justice mushroomed, and the range of courses offered expanded dramatically. Many of these were "Police Academy" versions of topics also offered--with different orientations--elsewhere in

CIP Code

the curriculum. "Community Relations" is a typical case, as it also appears under Social Work (44 series) and Human Services (1704 series). Our reconstruction of the categories and codes in this series sought to disaggregate these titles from otherwise undifferentiated masses.

430101 OLD Correctional Administration

Covers titles in Corrections Law, Corrections Systems, and, in general, the institutional and theoretical aspects of corrections and penology.

430102 MOD Corrections: Penology, Probation/Parole

Titles here focus on the operational aspects of corrections, and include Corrections Practices, Corrections Casework/Counseling/Procedures, Community-Based Corrections

430103 MOD Administration of Justice, Courts, Court Administration

Titles here refer to the operations of the judicial system in general, not the criminal justice system in particular (see 430104). They are not courses in the Judiciary (451003), and are not taught in law schools.

430104 OLD Criminal Justice Studies, Criminal Justice, Law Enforcement and Criminal Justice

430105 MOD Criminalistics, Evidence, Criminal Investigation, Testimony, Criminal Identification, Search & Seizure

430106 OLD Forensic Studies, Forensic Chemistry/Biology, Forensic Medicine/Science, Crime Lab

430107 MOD Law Enforcement: General Police Training, Police Academy, Crime Prevention and Control, Patrol Procedures and Operations, Firearms, Defensive Tactics, Law Enforcement Techniques, Introduction to Law Enforcement

These are the basic Police Academy curriculum titles with the exception of those dealing with administration (see 430108).

430108 OLD Law Enforcement Administration, Police Admin.

CIP Code

- 430109 OLD Security Services
- 430110 NEW Internships, Field Experience
- 430120 NEW Criminal Law & Procedure for Police, Law of Evidence, Legal Aspects of Criminal Justice, Criminal Codes [usually the state is named]
- Both student majors and institutional type are keys to coding these titles. If taught in a law school at the post-baccalaureate level, a title such as "Criminal Procedure" does not belong here, rather in 220101.
- 430130 NEW Police/Community Relations
- 430140 NEW Traffic Law/Control/Management, Vehicle Codes, Traffic Operations, Traffic Accidents/Investigs.
- "Traffic," not "transport."
- 430150 NEW Juvenile Justice/Delinquency/Crime/Procedures, Youthful Offender, Youth Crime
- Unless there was a compelling reason to do so, these titles were not coded under 450401, Criminology.
- 430160 NEW Narcotics, Drug Enforcement
- 430199 OLD Criminal Justice: Other
- 430201 OLD Fire Control and Safety Technology
- 430202 OLD Fire Protection Administration
- 430203 OLD Firefighting
- 430299 OLD Fire Protection: Other
- 439999 OLD Protective Services: Missing, etc.

PUBLIC AFFAIRS (44)

This section of the CIP covers both Public Administration and Social Work. In the former, many titles containing the word, "management," were originally coded under Business Administration (06). Our guideline was that a reference to the management of

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nonprofit, public-sector institutions and organizations placed the title in this series.

The Social Work titles required some minor disaggregation so as to reflect more accurately the type of courses taken by students in the Social Work/Welfare field.

- 440101 DEL Public Affairs: General
- No viable cases, i.e. the small number of courses originally coded here all belonged somewhere else.
- 440201 MOD Community Services/Organization/Resources
- 440301 MOD International Organizations, Int'l Service
- 440401 MOD Public Administration/Management
- Also covers titles in PA programs such as Administrative Procedures in Government, Government Regulations, Budgetary Process, Public Personnel Admin., Admin. Systems Analysis "Public Finance," however, was coded as an Economics course, 450651.
- 440501 OLD Public Policy Studies
- Includes titles in Public Policy Analysis, Policy Science, Policy Formation/Process
- 440601 MOD Public Works (Sanitation, Utilities, etc.), Waste Management
- 440602 DEL Public Transportation (combined in 440601)
- 440603 DEL Public Utilities (combined in 440601)
- 440699 DEL Public Works, Other (combined in 440601)
- 440701 OLD Social Work: General
- Covers titles in Child Welfare and Intervention Strategies, for example, but not titles referring to schools or interviewing.
- 440702 OLD Medical Social Work
- 440703 NEW Social Welfare
- 440710 NEW Social Work Practicums, Field

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440720 NEW Research in Social Work/Welfare

440799 OLD Social Work: Other, Unknown

449999 OLD Public Affairs: Other

450101 OLD Social Sciences: General, Survey

Also covers titles such as "Current Affairs."

ANTHROPOLOGY (4502)

This was originally a unitary field code. The titles were fairly easy to disaggregate, i.e. the sub-categories created themselves from the titles.

450201 MOD Anthropology: General, Introduction, Human Origins, Ascent of Man, Ancient Cultures, Peoples of the World, Culture and Personality

450202 NEW Cultural Anthropology, Ethnology, Folklore, Comparative Cultures, Anthropology of Religion, Magic, Ritual

450203 NEW Physical/Biolog/Medical Anthro, Human Osteology, Biology of Race

450204 NEW Non-Western Peoples & Cultures

450205 NEW Native Amer. (North, South, Meso) Peoples/Cultures

450206 NEW Language, Linguistics & Culture

450210 NEW Anthropology: Readings, Research, etc.

450299 OLD Anthropology: Other, Unknown

450301 OLD Archaeology

450302 DEL Archaeological Technology.

No cases.

450401 OLD Criminology, Crime & Delinquency, Criminal Behavior, Crime in America

These are not Administration of Justice (43 series) titles. Student major and pattern

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of other coursework is usually the key to assignment.

450501 OLD Demography, Population Dynamics/Analysis/Growth

ECONOMICS (4506)

Not all course titles including the word "economics" belong in economics. Titles in Business/Managerial Economics, for the most obvious example, have their own code (060501) under Business; those in Engineering Economics have their own code (140702) related to Industrial Engineering.

In the original CIP system, there was only one code for the entire field of economics. In disaggregating the field, we used four broad categories: Core Economics courses (450610-450642), Advanced Economic Analysis courses (45065 series), Institutional/Historical courses (45066 series), and Other courses.

450601 MOD Economy & Society, Economic Problems/Issues, Contemporary Economics, the Economic System, World Economics, Economics for Teachers

Courses with these titles were treated as "pre-disciplinary," i.e. as something less than the traditional introduction to the methods, terms, and major concepts of the field. "Consumer Economics" is usually 190402, not here.

450610 NEW Economics: Principles, Introduction, Principles & Problems, Basic Economic Theory/Analysis, Fundamentals, Political Economy, Macroeconomics, Microeconomics

Many introductory-level economics courses are divided into two terms, Micro and Macro. These were not to be confused with intermediate level theory courses in Micro and Macroeconomics that are usually required of all Economics majors. Our decision rule was that unless the words "intermediate" or "theory" or "analysis" appeared in a title referring to Micro or Macro, the course was classified here.

450620 NEW Intermediate Microeconomics, Microeconomic Theory, Microeconomic Analysis, Price Theory, Theory of Demand/Cost, Theory of the Firm, Economic Analysis of the Firm, Production Economics/Prices

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See comments on 450610.

- 450630** **NEW** Intermediate Macroeconomics, Aggregate Economic Analysis, Income and Employment, Growth Theory, Macroeconomic Theory/Analysis, Income Analysis/Policy, Income and Business Cycles, Business Fluctuations, National Income
- See comments on 450610.
- 450641** **NEW** Economic Statistics, Economic and Business Stats, Introduction to Quantitative Economics
- 450642** **NEW** Econometrics, Forecasting, Forecasting & Business Cycles
- 450651** **NEW** Public Finance, Economics of Government, Econ of Public Sector, Budgetary Process/Controls, State and Local Government Finance
- 450652** **NEW** International Trade/Finance/Economics, International Monetary Economics, Foreign Exchange
- 450653** **NEW** Monetary Theory, Fiscal Policy, Stabilization Policy
- 450654** **NEW** Environmental & Natural Resource Economics, Economics of Environment, Rural/Regional/Urban Economics, Economy of Cities
- 450655** **NEW** Labor and Human Resource Economics, Manpower Economics, Manpower Development, Trade Unions and Labor Market, Welfare and Social Security, Wage Theory and Determination
- 450657** **NEW** Money & Banking, Money & Capital Markets
- 450661** **NEW** History of Economic Thought/Doctrines
- 450662** **NEW** Comparative Economic Systems
- 450663** **NEW** Economic Development, 3rd World Economics, Economic Growth in Less Developed Counties, Problems of Underdevelopment
- 450679** **NEW** Economics: Other Determinable Topics
- 450699** **NEW** Economics: Missing, Indeterminable

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GEOGRAPHY (4507)

As in the case of Anthropology, this field formerly had only one code, but the titles were clear enough to disaggregate themselves.

450701	<u>MOD</u>	Geography: General; Introduction; Combined Topics
450702	<u>NEW</u>	Remote Sensing, Analytic Cartography, Field Mapping
450703	<u>NEW</u>	Cultural Geography
450704	<u>NEW</u>	Physical Geography
450705	<u>NEW</u>	Economic Geography
450706	<u>NEW</u>	Urban Geography
450710	<u>NEW</u>	Geography of North America/Anglo-America
450720	<u>NEW</u>	Geography of Europe, USSR
450730	<u>NEW</u>	Geography of Africa, Near East
450740	<u>NEW</u>	Geography of Asia, Pacific
450750	<u>NEW</u>	Geography of Latin America, Carribean
450799	<u>NEW</u>	Geography: Other

HISTORY (4508)

Originally a unitary field code, History presented a major challenge for disaggregation. We decided on four sub-series: general titles and topics that cut across nations, continents, and periods; a set of U.S. history titles; a set of European history titles; and a set of non-Western history topics. The U.S. and European history series rely on dates dividing periods, and rules had to be established for sorting courses on one side or another of the dateline. It may sound trite, but the criterion selected was "majority of years." Thus, a course in 18th Century European History crosses the dateline of 1789, but is classified as 450822. A trickier title would be "The Ante-Bellum South, Civil War, and After," but common sense would classify the course under "Topics in U.S. History to 1860" (450811).

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In the European series, if a specific country is identified in the course title, that fact takes precedence over the period of history indicated. Hence, "English History, 1485-1714," is classified under "History of Individual Countries" (450826), not "European History: Renaissance to 1789."

Needless to say, there were thousands of titles in the data base with the word "history" that did not belong under History (4508). These include Natural History (260614), the various Art History titles (5007 series), Music History (5009 series), etc. "U.S. Constitutional History" was coded under Political Science, 451003.

- | | | |
|--------|------------|---|
| 450801 | <u>MOD</u> | World History/Western Civilization, Modern World |
| 450802 | <u>NEW</u> | Ancient History, Classical History, Pre-History, Ancient Greece/Rome/Middle East |
| 450803 | <u>NEW</u> | Intellectual/Cultural History: General, Non-U.S. |
| 450804 | <u>NEW</u> | Economic/Business History (country unspecified) |
| 450805 | <u>NEW</u> | History of Religion/Church History |
| 450808 | <u>NEW</u> | Historiography, Research Methods |
| 450809 | <u>NEW</u> | History of Science, History of Technology |
| | | This category also included courses in the history of particular sciences and/or technologies. |
| 450810 | <u>NEW</u> | U.S. History Surveys |
| | | The titles here are recognizable either as broad coverages ("The Evolution of the U.S.") or as segments ("U.S. from 1620 to 1860") of a survey. |
| 450811 | <u>NEW</u> | Topics in U.S. History Through the Civil War, Colonial Society, Revolution and Constitution, National Period, the Age of Jackson, etc. |
| | | All Civil War titles were placed here. |
| 450812 | <u>NEW</u> | Topics in U.S. History Since the Civil War, the Gilded Age, the Depression, etc. |
| 450815 | <u>NEW</u> | U.S. Cultural, Intellectual History |

CIP Code

450816 NEW History of Individual States, Regions (e.g. the South, Frontier)

450817 NEW Afro-American History

450819 NEW U.S. History: Other

What tends to fall in this category are titles in Military, Diplomatic, and Social History that do not refer to a time period. "Crises in U.S. Diplomacy, 1898-1939" would go in 450812, but without the dates, it would be placed here.

450821 NEW European History: Dark & Middle Ages

450822 NEW European History: Renaissance to 1789

450823 NEW European History since 1789

450826 NEW History of Individual Countries

See comments in the introduction to this section.

450829 NEW European History: Other, General

450831 NEW Asian History

450832 NEW African History

450833 NEW Latin American History

450839 NEW History of Other World Regions, e.g. Oceania, Modern Middle East

450899 NEW History: Other, Unknown

450901 MOD International Relations/Conflict/Communications

"International Law" taught in a law school was classified under 220101; taught elsewhere, it was classified as 220199. U.S. Foreign Relations/Diplomacy courses were coded 451012.

POLITICAL SCIENCE (4510)

The principal reference point for the initial disaggregation of political science (formerly with only one code) was the set of test specifications for the Graduate Record field examination.

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The external faculty reviewers recommended finer distinctions in U.S. government and at least one category to cover political behavior. Courses concerning public opinion and propaganda, without a specifically political reference, however, were classified under Communications (090902).

451001 MOD Political Science/Government: Introduction, Principles of, Essentials, Basic Issues of, Political Problems, Contemporary Issues/Public Affairs

451002 NEW U.S. Government & Politics, Federal and State Government

Where "Federal and State" were mentioned together, the title was classified here. If "State" stood alone or in another combination, the title went under 451011. Titles covering the Presidency and Congress were also classified here.

451003 NEW U.S. Constitutional Law/Politics/History, Civil Rights, Civil Liberties, Judiciary

If taught in law schools, these titles were classified under 220101.

451004 NEW Political Theory/Philosophy/Ideology/Thought

Courses on specific ideologies, e.g. Marxism, Authoritarian Regimes, Theory of Monarchy, etc. were all coded here.

451005 NEW Comparative Government & Politics, Parliamentary Systems

But not "Parliamentary Procedure," which we coded under Public Speaking/Debate, 231001.

451006 NEW European Government & Politics

The European context and/or countries must be named in the course title to place it here. "Parliamentary Government," for example, would be under Comparative, not European.

451007 NEW Non-West. Government & Politics (including titles specifying Latin America, Near East, etc.), 3rd World Politics, Government in Developing Nations

CIP Code

451008	<u>NEW</u>	Methodology, Research Design, Political Statistics
451009	<u>NEW</u>	Political Behavior/Elections/Voters, Political Parties, Pressure/Interest Groups
451011	<u>NEW</u>	U.S. State, Local Government & Politics, Urban/Rural Politics, County/Municipal Government
451012	<u>NEW</u>	U.S. Foreign Policy, Diplomacy, National Security
451080	<u>NEW</u>	Political Science: Other Determinable Topics
451099	<u>NEW</u>	Political Science: Indeterminable, Unknown

SOCIOLOGY (4511)

This was a difficult field to disaggregate, even when we used the subject indices of the major academic journals. Both Office of Research staff and external faculty struggled to hold the sub-fields to a reasonable number. Note that Demography (450501), Criminology (450401), and Urban Studies (which has a heavy sociological component) all have codes distinct from the 4511 series.

451101	<u>MOD</u>	Sociology: Introduction, General, Principles
451102	<u>NEW</u>	Social Institutions: Marriage, Family, Church, School
451103	<u>NEW</u>	Sociology of Race, Minorities, Ethnic Groups, Race Relations
451104	<u>NEW</u>	Organizational Sociology, Orgizational Processes, Complex Organizations, Formal Organizations, Organizations and Society, Bureaucracy For an "Organizational Processes" title, student major was a strong guide: an 06 major (Business/Management) placed the title under 061501.
451105	<u>NEW</u>	Sociology of Aging, Health, Youth, Death
451106	<u>NEW</u>	Social Change, Movements, Collective Behavior Crowd Behavior, Psychology of Social Movements
451107	<u>NEW</u>	Social Theory
451108	<u>NEW</u>	Comparative Sociology, Third World Sociology

CIP Code

451109 **NEW** Social Problems, Deviance, Social Disorganization
451110 **NEW** Sociological Research Methods, Survey Design, Data Collection
451111 **NEW** Community/Rural/Urban Sociology
451112 **NEW** Social Stratification, Inequality, Poverty
451113 **NEW** Small Group Sociology, Socialization, etc.
451120 **NEW** Applied Sociology, Internships, etc.
451199 **NEW** Sociology: Missing, Indeterminable
451201 **OLD** Urban Studies, Urbanization
459001 **NEW** Social Statistics

Titles here are distinct from those statistics and methodology courses in specific disciplines, e.g. Quantitative Psychology (421501), Educational Statistics (13060), Content Analysis in Politics (451008), etc.

459999 **OLD** Social Sciences: Missing, Indeterminable

CONSTRUCTION TRADES (46)

Some 70% of the original course categories here recorded either no cases of course taking or so few that the category could not be maintained. Instead of listing all the deleted categories, we list only those that were viable.

460101 **OLD** Brickmasonry, Stone, Tile
460201 **OLD** Carpentry
460301 **OLD** Electric & Power Transmission Installation
460302 **OLD** Electrician

The category includes Wiring, Electrical Codes, but not Electrical Circuits (which are usually Engineering or Engineering Technology courses). Student major and institutional type were used to determine the assignment of titles.

CIP Code

460401 OLD Building & Property Maintenance
460499 M D Miscellaneous Construction Trades

This category covers specialties such as concrete placing/finishing, drywall, floor covering installation, glazing, insulation, painting, plastering, and roofing, all of which originally had separate CIP codes.

460501 OLD Plumbing, Pipefitting, & Steamfitting
460503 OLD Plumbing

MECHANICS AND REPAIRERS (47)

Over half the original course categories here failed to yield a sufficient number of coursetaking cases to justify their inclusion. In fact, after examination nearly a third of them yielded no viable cases whatsoever. As in the case of Construction Trades (46 Series), we list here only those categories and codes that were maintained. Most cases of miscoding involved failure to take student major, let alone institutional type, into account. A Computer Engineering major at the University of Illinois, for example, who took a course entitled, "Computer Trouble-Shooting," was not taking a course under 470104, "Computer Electronics Repair." On the other hand, a student at Milwaukee Area Voc/Tech who earned a certificate in "Electronics" and took a course entitled, "Computer Trouble-Shooting," was, in fact, taking a 470104 course.

470101 OLD Electrical/Electronics Equipment Repair: General
470103 OLD Communication Electronics Repair
470104 OLD Computer Electronics Repair
470105 OLD Industrial Electronics
470201 OLD Heating, AC & Refrigeration Mechanics: General
470202 OLD Cooling & Refrigeration
470203 OLD Heating & Air Conditioning
470299 OLD Heating, AC & Refrigeration Mechanics: Other

CIP Code

470301 OLD Industrial Equipment Maintenance & Repair

470401 MOD Electromechanical, Hydraulic, Pneumatic Instrument Repair

470499 OLD Miscellaneous Mechanics & Repairers: Other

Categories here included gunsmithing, locksmith, musical instrument repair, watch repair, etc.
--all of which originally had separate CIP codes.

470501 MOD Stationary Energy Sources, Conventional Power Generation

470601 OLD Vehicle/Mobile Equipment Mechanics: General

470602 RES Aircraft Mechanics, Airframe, Powerplant

Student major and institutional type are keys to the assignment of titles here, as Aeronautical Engineers take courses with abbreviated titles such as "Powerplant." Such cases should obviously be coded elsewhere, e.g., 140201 or 150801.

470603 OLD Auto Body Repair

470604 OLD Automotive Mechanics

470605 OLD Diesel Engine Mechanics

470606 OLD Small Engine Repair

470699 OLD Vehicle etc. Mechanics: Other

479999 OLD Mechanics & Repairers: Other

PRECISION PRODUCTION (48)

This is a strange section of the CIP system. The portions dealing with Drafting (4801) and Graphic/Printing Communications (4802) are brimming with coursetaking cases. They reflect more of what the mainstream of college students do as well as the growth of the service sectors of the economy. The other subsections of the 48 series, with the exception of Welding, are sparsely populated.

The various drafting titles (4801) are not industrial arts courses, e.g. 210103. They are usually taken as part of Engineering Technology (15 series) programs. The student's total record is the guide to assignment here.

CIP Code

One must also be careful to distinguish the commercial art, photography, lithography, etc. titles that belong here from those that belong under either Design (5004) or Fine Arts (5007). This is a case in which knowledge of particular institutions counts in coding. A "Composition and Graphics" course at Rochester Institution of Technology is a 4802 course; at Pratt Institute, it is more likely 500402.

480101	<u>MOD</u>	Drafting: General, Technical Drafting
480102	<u>OLD</u>	Architectural Drafting/Detailing/Drawing/ Rendering/Delineation
480103	<u>OLD</u>	Civil/Structural Drafting
480104	<u>OLD</u>	Electrical/Electronics Drafting
480105	<u>OLD</u>	Mechanical Drafting
480199	<u>OLD</u>	Drafting: Other
480201	<u>OLD</u>	Graphic & Printing Communications: General
480202	<u>DEL</u>	Bookbinding
		Did not meet threshold criterion.
480203	<u>OLD</u>	Commercial Art, Production Art, Air Brush
480204	<u>OLD</u>	Commercial Photography
480205	<u>MOD</u>	Typesetting, Composition, Typography
480206	<u>OLD</u>	Lithography, Platemaking
480207	<u>OLD</u>	Photographic Lab & Darkroom
480208	<u>OLD</u>	Printing Press Operations
480209	<u>OLD</u>	Silk Screen Making & Printing
480210	<u>DEL</u>	Photoengraving
		No cases.
480299	<u>OLD</u>	Graphic & Printing Communications: Other
480301	<u>MOD</u>	Leatherworking & Upholstery: All

CTP Code

480302 DEL Saddlemaking and Repair
No cases.

480303 DEL Upholstering
The few courses originally coded here belonged in the Home Furnishings section of Vocational Home Economics (2005).

480304 DEL Shoe & Boot Repair
No cases.

480399 DEL Leatherworking and Upholstering: Other
Did not meet threshold criterion.

480401 DEL Precision Food Production: General
The few titles originally found here more properly belonged under 010401 (Agricultural Products and Processing). Student major and institutional type were strong clues.

480402 OLD Meatcutting

480403 DEL Slaughtering and Butchering
No cases. No comment.

480499 DEL Precision Food Production: Other
No cases.

480501 OLD Precision Metal Work: General

480502 DEL Foundry Work
Did not meet threshold criterion.

480503 OLD Machine Tool Operation/Machine Shop

480504 OLD Metal Fabrication

480505 DEL Metal Patternmaking
No cases.

480506 OLD Sheet Metal

CIP Code

480507 OLD Tool & Die Making

480508 OLD Welding

There are many titles referring to welding. Most of them belong here. There are some that refer to the theoretical and design aspects of Welding, and these should be classified under 150610.

480599 OLD Precision Metal Work: Other

480601 DEL Industrial Ceramics Manufacturing

No cases.

480602 OLD Jewelry Design/Fabrication/Repair

Other than institutional type, there are no clues to distinguish a "jewelry design" title here from one under 500206.

480604 DEL Plastics

Did not meet threshold criterion.

480699 OLD Precision Work: Assorted Materials

480701 OLD Woodworking: General

480702 OLD Furniture Making

480703 OLD Millwork & Cabinet Making

480799 OLD Woodworking: Other

489999 DEL Precision Production: Other

Did not meet threshold criterion.

TRANSPORTATION AND MATERIAL MOVING (49)

Half of the original categories/CIP codes in this section were deleted for lack of cases. Listed are only those that were viable.

490101 OLD Air Transport: General, Fundamentals of Aviation, Theory of Flight

CIP Code

490102 OLD Airplane Piloting & Navigation, Ground School, Commercial Pilot, Advanced Aviation, Aircraft Performance, Aviation Meteorology, Instrument Flight, Sailplane Indoctrination, etc.

"Aeronautics" is usually classified as 150801, not here.

490104 OLD Aviation Management, Aviation Laws/Regs/Safety Airport Operation

490105 OLD Air Traffic Control

490106 OLD Flight Attendants

490107 OLD Airplane Piloting: Private

490199 OLD Air Transport: Other

490201 MOD Vehicle & Equipment Operation: All

This category covers titles referring to truck and bus driving, construction equipment operation, and mining equipment operation, all of which originally had their own CIP codes.

490304 OLD Deep Water Diving

490308 OLD Sailors & Deckhands

490399 OLD Water Transport: Other

499999 OLD Transportation: Other

FINE and PERFORMING ARTS (50)

Most of the recoding work was focused on either disaggregation of general categories such as Art History and Music History, or on distinguishing performance from production courses in Dance and Theatre. And while many "Film Studies" courses are taught in literature departments, unless "literature" was specifically referenced in the title, the course was classified in the 5006 series (otherwise the course would be 239004).

500101 OLD Visual & Performing Arts: General, Survey

Also covers titles such as "Art Forms," "Experiencing Arts," and combinations such as "Art/Music." Put a title such as "Interrelations of Arts" was classified as 300403.

CIP Code

500102 NEW Visual Communications, Visual Experience,
Visual Analysis/Thinking/Research

This was one of 19 course titles for which we conducted an extensive catalogue search, using a collection of 1977 college catalogues on microfiche. The consensus elements of the catalogue descriptions indicated a general visual semiotics course. The illustrative contexts included advertising, television, and graphics.

500201 OLD Crafts: General

500202 OLD Ceramics, Pottery

500204 OLD Fiber/Textiles/Weaving, Loom

But not "Textiles and Clothing" (190901), although student major and overall transcript "tone" must be used with "Clothing and Textiles" (sometimes 200103).

500205 OLD Glass, Glassblowing

500206 OLD Metal, Jewelry

500299 OLD Crafts: Other

500301 MOD Dance, Choreography, Labanotation

This was a tough category, as various types of dance (ballet, jazz, modern, folk, square, ballroom, social, etc.) are also taught under Physical Education Activities (360108). We did not classify folk, square, ballroom, or social dancing titles here. We also did not include courses in ballet/jazz/modern dance carrying less than 2 credits, as they were more likely to be Phys Ed Activity courses. By ensuring that choreography, scoring, labanotation, etc. courses were coded here, we mean to emphasize the more "academic" tone of this category.

500302 NEW History of Dance

500401 MOD Design: General, 2D, 3D, Design and Composition

500402 MOD Graphic Design/Arts/Lettering

CIP Code

- 500403 OLD Illustration Design, Illustration
- 500404 MOD Industrial Design, Product Design, Packaging
- 500405 MCD Theatre Design, Stagecraft
- Includes Costuming, Make-up, Lighting, Set Design, and other related titles. "Costuming" is not a Home Economics course.
- 500499 OLD Design: Other
- 500501 MOD Dramatic Arts, Acting, Directing
- 500502 NEW History of Theatre, Drama Criticism
- 500601 OLD Film Arts: General, Language of Film
- 500602 MOD Cinematography/Film-Making/Production
- 500603 DEL Film Animation
- The few cases here were combined with 500602.
- 500604 DEL Holography
- No cases.
- 500605 OLD Photography, Light/Colors, Black & White Photography
- 500606 OLD Video
- 500607 NEW History of Film, Theory, Criticism
- All course title referring to films of noted directors (e.g. Huston, Bergman, Eisenstein) are coded here, along with courses in film genres (mystery, romance, documentary).
- 500699 OLD Film Arts: Other, Indeterminable
- 500701 MOD Fine Arts: General, Theory, Principles, Foundations/Fundamentals of Art, Basic Studio
- Note that titles such as "Art for Children" or "Art in EC [Early Childhood]" are coded under Education, 131302.

CIP Code

500702 **DEL** Art Conservation
Did not meet threshold criterion.

500703 **OLD** Art History & Appreciation
Includes courses in all periods, movements, artists, e.g. Dutch Mannerists, Cubism, Monet.

500704 **OLD** Arts Management

500705 **OLD** Drawing, Drawing and Painting, Drawing and . . .
The word, "drawing," in combination with other fine arts media, placed the title here.

500706 **OLD** Intermedia

500708 **OLD** Painting, Watercolor, Oil

500709 **OLD** Sculpture

500710 **OLD** Printmaking, Intaglio

500711 **NEW** Color, Color Theory

500730 **NEW** Non-Western Art: Hist & Appreciation

500740 **NEW** History of Architecture, Appreciation of Architecture, Architectural Criticism

500799 **OLD** Fine Arts: Other

500901 **MOD** Music: Ear Training, Dictation, Solfeggio, Sight-Singing, Basic Musicianship etc.

500902 **MOD** Music History & Appreciation: General, Art of Listening, Concert Music/Hour, Heritage of Music, Humanities: Music, Masterpieces

500903 **OLD** Music Performance, Applied Music
Covers a myriad of titles, such as Band, Chorus, Orchestra, Ensemble, Chamber Players, Conducting, Class ---- [piano, woodwind, brass, strings, percussion, etc.]

500904 **MOD** Music Theory, Form and Analysis, Harmony, Counterpoint, Orchestration, Arranging, Composing

CIP Code

500905	<u>NEW</u>	Music Literature, Brass/Woodwind/etc. Literature
500906	<u>NEW</u>	Music History: Classical, Baroque, Romantic, Chamber, Symphony
500907	<u>NEW</u>	Music History: Opera & Musical Theatre, Musical Comedy, Broadway
500908	<u>NEW</u>	Music History: Jazz
500909	<u>NEW</u>	Music History: Pop, Rock, Folk
500910	<u>NEW</u>	Music History: Afro-American Music
		"Afro-American" or "Black" must be in the title. A title such as "Duke, Miles, 'Trane" is Jazz History (500908), even though all three subjects are black. "History of Motown" would be here.
500920	<u>NEW</u>	Non-Western Music
500999	<u>OLD</u>	Music: Other, Indeterminable
509999	<u>OLD</u>	Visual & Performing Arts: Other

OTHER (90)

901000	<u>NEW</u>	Cooperative Education: Field Unspecified
902000	<u>NEW</u>	Readings, Independent Study: Field Unspecified
903000	<u>NEW</u>	College/Freshman Orientation
904000	<u>NEW</u>	Senior Seminars, Theses: Field Unspecified
908000	<u>NEW</u>	Unclassifiable Titles
999999	<u>OLD</u>	Missing

DATA FROM THE MAP

- o **Percentage of Students Completing Undergraduate Courses
in 1,037 Course Categories**
- o **Percentage of Students Completing Undergraduate Courses
in 103 Aggregate Course Categories**
- o **Percentage Distribution of all Completed Courses,
Graduate and Undergraduate, by Type of Institution**

**PERCENTAGE OF NLS/PETS STUDENTS COMPLETING UNDERGRADUATE
COURSES IN EACH COURSE CATEGORY, 1972-1984**

Note: Percentages are weighted; and each student carries a weight representing his/her position in the "panel" of those who participated in the NLS/PETS. The N for BAs in this table is 4,927. The N for all those who earned more than 10 credits (including the BAs) is 10,734. Because the percentages are weighted, multiplying them by the Ns will not provide an accurate population estimate.

	All	Men	Wom	All	Men	Wom
	BAs	BAs	BAs	>10 Cred	>10 Cred	>10 Cred
*01: Agricultural Bus. & Production						
Agric. Business & Mgmt: Gen.	0.7%	1.2%	0.1%	0.6%	1.1%	0.1%
Agricultural Business	0.5	0.7	0.1	0.4	0.7	0.1
Agricultural Economics	1.8	2.7	0.8	1.3	2.1	0.5
Farm & Ranch Management	0.8	1.4	<0.1	0.7	1.2	0.1
Agric. Bus., Mgmt., Mkt: Oth.	0.2	0.3	<0.1	0.2	0.2	0.1
Agric. Mechanics: General	0.3	0.5	<0.1	0.3	0.5	<0.1
Agric. Electrification, etc.	0.3	0.6	---	0.2	0.5	---
Agric. Mechanics	0.3	0.5	<0.1	0.2	0.4	<0.1
Agric. Power Machinery	0.4	0.7	0.1	0.3	0.6	<0.1
Agric. Struct., Equip, Facil.	0.4	0.7	---	0.3	0.5	<0.1
Agric. Soil/Water Practices	0.9	1.6	0.2	0.5	1.0	0.1
Agric. Production: General	0.2	0.3	0.1	0.2	0.3	0.1
Animal Production	0.9	1.3	0.5	0.7	1.0	0.4
Crop Production	1.2	1.8	0.5	1.0	1.7	0.3
Agric. Production: Other	0.4	0.7	0.1	0.2	0.4	0.1
Agric. Products/Process	0.5	0.6	0.4	0.3	0.4	0.2
Agric. Supplies/Services	0.1	0.1	---	0.2	0.3	---
Horse Handling & Care	0.3	0.3	0.3	0.3	0.2	0.4
Horticulture: General	1.2	1.2	1.1	0.9	1.0	0.8
Arboriculture	0.2	0.3	0.2	0.2	0.1	0.2
Ornamental Horticulture	0.6	0.5	0.8	0.6	0.3	0.8
Greenhouse Operation	0.3	0.4	0.2	0.2	0.2	0.2
Landscaping	0.7	0.8	0.5	0.5	0.6	0.4
Nursery Operation	0.3	0.4	0.1	0.2	0.2	0.3
Turf Management	0.2	0.3	0.2	0.2	0.3	0.1
Agribus/Agric. Product: Oth	0.6	0.8	0.3	0.4	0.7	0.2

02: Agricultural Sciences

Agric. Sciences: General	1.1	1.3	0.9	0.7	0.9	0.5
Animal Sciences: General	1.8	2.4	1.0	1.4	1.9	0.8

***These numbers refer to sections and sub-sections of the Classification of Instructional Programs, 1985 edition, as revised in this volume.**

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wcm >10 Cred
Anim Breed, Reprod, Genetics	0.9%	1.4%	0.4%	0.6%	0.8%	0.4%
Animal Health	0.4	0.5	0.3	0.3	0.4	0.3
Animal Nutrition, Feeds	1.3	1.9	0.6	1.0	1.4	0.5
Dairy	0.6	0.8	0.3	0.4	0.7	0.2
Livestock	1.0	1.5	0.5	0.8	1.2	0.4
Poultry	0.5	0.7	0.3	0.3	0.5	0.1
Animal Sciences: Other	0.3	0.3	0.3	0.2	0.3	0.2
Food Sciences	0.9	0.7	1.1	0.6	0.5	0.7
Plant Sciences: General	1.2	1.4	0.9	0.8	1.0	0.6
Agronomy	0.7	1.0	0.3	0.5	0.8	0.2
Horticultural Science	0.4	0.4	0.4	0.3	0.3	0.4
Plant Protect/Pest Mgmt	0.3	0.5	0.1	0.3	0.5	0.1
Range Management	0.4	0.7	0.1	0.3	0.5	<0.1
Plant Sciences: Other	0.4	0.4	0.3	0.2	0.2	0.2
Soil Sciences & Conservation	2.8	4.1	1.4	2.0	2.9	0.9
Agric Sciences: Other	0.4	0.7	0.2	0.3	0.5	0.1

03: Renewable Natural Resources

Renew Nat. Resources: Gen.	0.6	0.8	0.3	0.4	0.6	0.2
Land/Water Use, Mgmt, Conserv	0.4	0.6	0.3	0.2	0.3	0.2
Conservation: General	3.0	3.4	2.6	1.9	2.3	1.4
Resource Mgmt & Regulation	0.4	0.5	0.3	0.2	0.3	0.2
Fishing & Fisheries	0.4	0.5	0.2	0.2	0.3	0.1
Forestry Production: General	0.3	0.5	0.1	0.2	0.3	<0.1
Logging, Forest Harvesting	0.1	0.2	---	0.1	0.3	0.3
Forestry & Rel. Sci: General	1.0	1.3	0.6	0.7	1.1	0.1
Forestry Sci., Dendrology	0.8	1.2	0.2	0.5	0.9	0.1
Forest Management	0.5	1.0	<0.1	0.4	0.7	0.1
Wood Sci, Forest Mensuration	0.4	0.7	0.1	0.3	0.5	0.1
Forestry & Related Sci.: Oth	0.5	0.9	0.1	0.4	0.7	0.3
Wildlife Mgmt & Conserv.	1.2	1.7	0.5	0.7	1.1	0.3
Renewable Nat. Resour: Oth	0.6	0.9	0.3	0.4	0.5	0.2

04: Architecture

Archit. & Envir Design: Gen	0.2	0.4	---	0.2	0.3	0.1
Architecture	1.3	1.8	0.8	1.0	1.5	0.5
City, Comm & Region. Planning	1.2	1.5	0.8	0.6	0.9	0.4
Environmental Design	1.0	1.3	0.8	0.7	0.9	0.4
Interior Design	0.9	0.2	1.6	0.7	0.2	1.3
Landscape Architecture	0.6	0.9	0.2	0.5	0.7	0.2
Urban Design	0.4	0.5	0.4	0.2	0.3	0.2
Archit. & Envir Design, Oth	0.4	0.5	0.3	0.2	0.3	0.2

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
0501: Area Studies						
African Studies	1.1%	1.0%	1.1%	0.7%	0.7%	0.7%
American Studies, Amer. Civ.	6.5	5.9	7.2	4.7	4.6	4.8
Asian Studies: General	0.9	0.9	1.0	0.6	0.6	0.5
East Asian Studies	1.2	1.0	1.4	0.7	0.7	0.7
East European Studies	0.1	0.1	0.2	0.1	<0.1	0.1
European Studies: General	1.3	1.4	1.1	0.8	0.9	0.6
Latin American Studies	1.7	1.6	1.8	1.0	0.9	1.1
Middle Eastern Studies	0.8	0.9	0.8	0.5	0.6	0.5
Pacific Area Studies	0.3	0.2	0.3	0.2	0.1	0.2
Russian and Slavic Studies	1.0	1.0	1.0	0.5	0.5	0.5
Scandinavian Studies	0.3	0.3	0.2	0.2	0.2	0.1
South Asian Studies	0.2	0.3	0.2	0.1	0.1	0.1
Southeast Asian Studies	0.2	0.2	0.1	0.1	0.1	0.1
Western European Studies	0.2	0.1	0.4	0.1	0.1	0.2
Canadian Studies	0.4	0.5	0.3	0.2	0.2	0.1
Area Studies: Other	0.2	0.2	0.2	0.1	0.1	0.1

0502: Ethnic Studies

Afro-American/Black Studies	3.1	2.6	3.7	2.2	1.9	2.6
Native American Studies	2.8	2.1	3.6	1.8	1.4	2.1
Hispanic American Studies	1.3	1.1	1.5	1.0	0.9	1.2
Islamic Studies	0.2	0.2	0.2	0.1	0.1	0.1
Jewish Studies	0.9	1.2	0.7	0.5	0.6	0.4
Asian-American Studies	0.1	0.1	0.2	0.1	0.1	0.1
Ethnic Studies: Other	0.4	0.5	0.4	0.3	0.3	0.3

06: Business

Gen. Business Principles	8.8	11.7	5.5	10.7	12.3	9.0
Business Law, Legal Envir.	19.8	27.3	11.5	15.9	20.0	11.6
Business and Government	2.7	3.8	1.4	1.5	2.2	0.8
Intro. Accounting	22.6	29.0	15.3	20.7	23.7	17.5
Tax Accounting	6.8	9.5	3.7	4.4	5.8	2.9
Account.: Advanced Topics	14.2	19.9	7.9	9.4	12.7	6.0
Finance: Princ., Corporate	16.1	22.9	8.5	9.1	13.4	4.7
Bank/Finan. Inst. Operats.	1.4	2.3	0.4	1.1	1.6	0.6
Securities and Investments	4.1	6.5	1.4	2.3	3.6	0.9
Management: Gen, Theory	19.0	26.1	11.1	13.9	18.4	9.1
Operations & Product. Mgmt.	7.6	11.5	3.2	4.3	6.8	1.7
Business Economics	1.5	2.1	0.8	0.9	1.2	0.5
Personnel Mgt./HRD	8.4	11.4	5.0	6.3	8.5	4.0
Institutional Management	0.6	0.8	0.4	0.4	0.6	0.3
Transportation Management	0.9	1.3	0.5	0.6	0.9	0.4
Insurance & Risk Management	3.9	5.9	1.7	2.3	3.6	1.0
International Management	1.3	2.2	0.4	0.7	1.1	0.2

	All BAS	Men BAS	Wom BAS	All >10 Cred	Men >10 Cred	Wom >10 Cred
Labor/Industrial Relations	5.1%	7.5%	2.4%	3.2%	4.7%	1.5%
Management Information Syst.	2.6	3.5	1.6	1.6	2.1	1.2
Business Statistics	7.0	10.0	3.6	4.3	6.2	2.3
Operat. Research/Decis. Sci.	6.4	9.1	3.4	3.3	4.9	1.7
Manage. Sci./Bus. Research	1.9	2.6	1.0	1.1	1.5	0.6
Marketing Management	11.0	15.1	6.4	6.8	9.7	3.8
Marketing Research	3.9	5.5	2.2	2.1	2.9	1.3
Organizational Behavior	10.3	13.8	6.4	6.5	8.9	3.9
Real Estate	4.3	6.6	1.7	3.1	4.5	1.6
Small Business Management	1.6	2.4	0.6	1.4	2.2	0.6
Internships in Business	0.8	1.0	0.6	0.7	0.6	0.8
Personal Finance	2.9	3.8	1.9	2.0	2.5	1.4
BusAdmin: Indetermin/Missing	4.5	6.3	2.4	3.1	3.9	2.2

07: Business Support Services

Accnt/Bookkeep. Support: Gen	0.1	0.1	0.2	0.8	0.3	1.3
Comput. Accounting	0.1	---	0.1	0.3	0.1	0.4
Bookkeeping	0.1	---	0.1	0.6	0.2	1.0
Machine Billing/Office Mach.	1.2	0.8	1.7	2.7	1.2	4.2
Account/Bookkeep Supp: Oth	<0.1	---	<0.1	0.2	0.1	0.3
Banking/Related Fin Prog Sup	0.2	0.2	0.3	0.3	0.2	0.5
Banking Occupations, Other	0.2	0.2	0.2	0.2	0.3	0.2
Business Data Process.: Gen	2.8	3.3	1.7	2.5	3.0	1.9
Business Computer Operation	0.4	0.4	0.4	0.5	0.5	0.5
Bus Data Entry Equip Oper.	0.2	0.1	0.3	0.6	0.2	1.1
Business Data Programming	0.8	1.0	0.4	0.5	0.7	0.4
Office Supervis./Mgmt	1.5	1.2	1.8	2.1	1.3	3.0
Personnel & Training Progs.	0.1	0.1	<0.1	0.1	0.1	0.1
Secretarial Progs.: General	2.5	0.7	4.5	6.2	0.8	11.9
Court Reporting	0.1	---	0.1	0.2	---	0.4
Executive Secretarial	0.1	<0.1	0.1	0.3	0.1	0.6
Legal Secretarial	0.2	0.3	0.1	0.4	0.2	0.7
Medical Secretarial	0.1	0.1	0.2	1.0	0.2	1.8
Secretarial	0.2	0.1	0.4	0.9	<0.1	1.8
Stenography	1.9	0.2	3.8	5.5	0.2	11.1
Secretar. Programs: Other	<0.1	---	0.1	0.5	<0.1	0.9
General Office Programs	1.6	1.4	1.8	3.2	1.1	5.4
Typing, Clerk-Typist	1.8	0.9	2.9	5.7	1.9	9.7
Business Correspondence	0.5	0.5	0.4	1.0	0.5	1.6
Duplicat. Machine Operation	0.2	0.1	0.3	0.3	<0.1	0.6
General Office Clerk	0.4	0.4	0.3	1.6	0.7	2.6
Receptionist	0.1	<0.1	0.1	0.2	<0.1	0.3
Gen. Office Progs.: Other	0.4	0.4	0.5	0.8	0.3	1.3
Word Processing	0.1	0.2	<0.1	0.2	0.1	0.4
Bus. Communications/English	5.4	6.4	4.3	6.3	5.2	7.3
Bus. Support: Other	0.1	0.1	0.1	0.2	0.1	0.4

	All	Men	Wom	All	Men	Wom
	BAs	BAs	BAs	>10	>10	>10
				Cred	Cred	Cred

08: Specialized Marketing

Fashion, Apparel Marketing	0.3%	0.1%	0.5%	0.5%	0.1%	0.8%
Fashion Modeling	<0.1	---	<0.1	0.2	<0.1	0.4
Display	0.2	0.2	0.3	0.3	0.2	0.3
Food Marketing	0.1	0.2	<0.1	0.1	0.2	0.1
Industrial Sales	0.5	0.7	0.3	0.3	0.4	0.2
International Marketing	1.0	1.4	0.5	0.5	0.8	0.3
Purchasing	0.5	0.7	0.3	0.5	0.6	0.5
Retailing	3.1	4.1	2.1	2.6	3.2	1.9
Sales	3.5	4.6	2.2	3.2	4.1	2.3
Marketing/Distrib.: General	11.3	14.9	7.1	8.0	10.6	5.1
General Marketing: Other	1.0	1.4	0.6	0.7	0.8	0.5
Hospit. & Recreat. Market.	0.3	0.5	0.1	0.2	0.4	0.1
Insurance Marketing	0.7	1.0	0.2	0.4	0.6	0.1
Transport. & Travel Market.	0.4	0.6	0.1	0.3	0.4	0.2
Tourism	0.1	0.2	<0.1	0.1	0.2	<0.1
Travel Services Marketing	0.1	0.1	0.1	0.1	<0.1	0.2
Auto Vehicles/Access Mktg.	0.1	0.1	---	0.1	0.3	---
Marketing/Distrib.: Other	0.7	0.6	0.7	0.4	0.4	0.4

09: Communications

Communications: General	35.6	35.1	36.2	29.4	29.8	28.9
Advertising	6.7	7.8	5.5	5.0	5.9	4.0
Communic. Research/Theory	1.9	1.9	1.9	1.1	1.1	1.0
Journalism, Reporting, Editing	5.6	5.4	5.9	3.6	3.5	3.6
Public Relations	2.9	3.2	2.6	2.0	2.4	1.6
Radio/TV News Broadcasting	2.0	2.3	1.7	1.2	1.6	0.9
Radio/TV: Writ., Directing	3.5	4.2	2.8	2.3	2.8	1.7
Mass Communications	6.4	6.3	6.5	4.0	4.2	3.9
Public Opinion Propaganda	1.2	1.3	1.1	0.7	0.7	0.6
Communic. Law, Ethics	1.6	1.6	1.5	0.8	0.9	0.8
Interpersonal Communication	8.4	8.5	8.2	6.1	6.0	6.3
Interviewing	0.4	0.6	0.2	0.3	0.4	0.3
Internships in Communication	0.9	0.7	1.0	0.5	0.4	0.6
Communicat.: Other, Missing	2.8	2.7	2.9	2.0	2.0	1.9

10: Communications Technology

Educational Media Technology	1.6	0.8	2.4	0.8	0.5	1.1
Motion Picture Technology	0.1	0.1	0.1	0.1	0.1	0.
Photographic Technology	0.2	0.3	0.1	0.2	0.3	0
Radio/TV Production Technol	1.1	1.5	0.5	0.7	1.1	0.3
Sound Recording Technol	0.3	0.5	0.2	0.2	0.4	0.1
Communic. Technols.: Other	0.3	0.4	0.2	0.2	0.3	0.1

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
11: Computer Science						
Intro. Computer Science	8.2%	11.5%	4.4%	5.6%	7.9%	3.1%
Computer Literacy	2.2	3.0	1.3	1.6	2.2	1.0
Comput Prog: Gen, Spec Lang	10.1	14.2	5.4	7.5	10.7	4.2
Algorithms, Algorith. Devel	0.8	1.3	0.1	0.5	0.9	0.1
Machine/Assembly Language	0.9	1.3	0.4	0.8	1.2	0.4
Comp Lang., Gram, Theory	0.8	1.2	0.2	0.5	0.8	0.1
Data Processg: Gen., RPG	4.6	5.9	3.2	5.8	6.5	5.0
Data/Info/File Structures	0.6	1.0	0.2	0.4	0.6	0.1
Info Systems, Data Base Syst.	1.2	1.8	0.5	0.9	1.3	0.4
Systems Analysis, Design	1.7	2.3	1.1	1.4	1.8	0.9
OS, JCL, Syst. & Software	0.5	0.9	0.1	0.5	0.7	0.2
Comput. Applications: Gen	0.6	0.8	0.3	0.4	0.5	0.2
Comput. Applic.: Sci.& Engin	0.7	1.3	0.1	0.5	0.8	0.1
Comput. Applicat.: Business	1.3	2.1	0.4	0.8	1.2	0.3
Comput. Applic.: Oth Fields	0.5	0.7	0.2	0.3	0.5	0.1
AI,Graphics, Oth Adv.Topics	0.7	1.2	0.1	0.4	0.6	0.1
Numerical Analysis/Methods	1.5	2.3	0.6	0.8	1.3	0.3
Other Comput Sci Topics	0.7	1.0	0.2	0.4	0.6	0.2
Comp.Sci: Indeterm/Missing	0.5	0.9	<0.1	0.3	0.5	0.1

12: Personal Services

Funeral Services	---	---	---	<0.1	0.1	<0.1
Cosmetology, Barbering	0.1	0.1	0.2	0.5	0.1	0.8
Consumer/Pers. Serv.: Other	0.2	0.3	0.2	0.2	0.3	0.1

13: Education

Education: General	8.1	4.6	12.1	4.9	3.0	6.9
Bilingual/Crosscult Educat	0.5	0.2	0.8	0.3	0.1	0.4
Curric. & Curric. Theory	2.7	1.4	4.1	1.4	0.7	2.1
Instruc. Methods & Mats.:Gen	8.8	5.1	13.1	4.5	2.7	6.3
School Administra., Ed & Law	1.1	0.9	1.3	0.6	0.5	0.7
Educational Supervision	0.4	0.4	0.5	0.2	0.2	0.3
Higher Ed Admin & Research	0.1	<0.1	0.2	0.1	<0.1	0.1
Educational Media	5.2	2.8	7.9	2.6	1.5	3.8
Evaluation and Research: Gen	1.2	0.7	1.8	0.6	0.3	1.0
Educational Statistics	0.5	0.1	0.8	0.2	0.1	0.4
Educ. Testing, Measurement	6.2	4.3	8.4	3.1	2.3	4.0
Educ. Research: Other	0.6	0.4	0.9	0.3	0.2	0.4
Educational Psychology	21.9	13.4	31.4	12.2	7.9	16.6
School Psychology	0.7	0.3	1.2	0.3	0.1	0.5
Soc., Hist., Phil. Foundat.	11.9	7.0	17.5	6.4	3.9	9.0
Special Educat.: General	5.6	1.8	9.9	3.1	1.0	5.2
Spec.Ed.: Cult. Disadvant.	0.2	0.1	0.4	0.1	<0.1	0.2
Spec.Ed: Deaf/Hear. Impaired	0.4	0.1	0.6	0.2	0.1	0.4

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Spec.Ed.: Gifted & Talented	1.7%	0.4%	3.2%	1.0%	0.2%	1.9%
Sped.Ed.: Emotionally Hand.	0.5	0.1	1.0	0.3	0.1	0.5
Sped.Ed.: Mentally Handic.	2.2	0.4	4.2	1.1	0.3	2.0
Spec.Ed.: Multiple Handic.	0.4	0.1	0.6	0.2	0.1	0.4
Spec.Ed.: Physically Handic.	0.3	0.1	0.6	0.2	<0.1	0.4
Spec.Ed.: Remedial Education	0.6	---	1.3	0.3	0.2	0.6
Spec.Ed.: Learning Disabils.	1.9	0.4	3.5	0.9	0.1	1.6
Spec.Ed.: Speech Correction	1.6	0.2	3.1	0.8	0.1	1.6
Spec.Ed.: Other	2.7	0.7	4.9	1.4	0.4	2.3
Stud. Counseling, Guidance	1.5	0.8	2.3	0.8	0.5	1.2
Higher Ed. Stud. Pers. Servs	0.2	0.1	0.2	0.1	<0.1	0.1
TE: Adult and Continuing Ed	0.3	0.2	0.3	0.1	0.1	0.1
TE: Elementary Education	8.8	2.7	15.7	4.6	1.6	7.8
TE: Junior High/Middle Sch.	0.3	0.2	0.4	0.1	0.1	0.2
TE: Early Childhood/Pre-Elem	4.5	0.6	8.8	2.6	0.4	5.0
TE: Secondary Education	7.7	6.1	9.6	3.7	3.1	4.4
TE: Gen Progs: Other/Indet	1.0	0.6	1.5	0.6	0.3	0.8
TE: Agricultural Education	0.3	0.5	0.1	0.2	0.1	0.1
TE: Art Education	8.1	2.4	14.5	4.4	1.4	7.5
TE: Business/Market/Distrib	0.7	0.4	1.0	0.4	0.2	0.5
TE: Driver and Safety Educ.	1.1	1.2	0.9	0.6	0.8	0.5
TE: English Education	3.1	1.1	5.4	1.6	0.6	2.8
TE: Foreign Language Educat.	0.7	0.1	1.4	0.4	0.1	0.6
TE: Health/Nutrit. Education	7.2	4.5	10.2	3.9	2.7	5.3
TE: Home Economics Educat.	0.5	0.1	1.0	0.3	0.1	0.5
TE: Industrial Arts Educat.	0.8	0.9	0.8	0.5	0.6	0.4
TE: Mathematics Education	8.0	2.4	14.3	4.4	1.5	7.5
TE: Music Education	8.2	3.0	14.0	4.3	1.7	7.0
TE: School Phys. Ed., Coach	9.3	7.3	11.7	5.6	4.9	6.4
TE: Reading Education	9.4	3.2	16.2	4.7	1.8	7.8
TE: Science Education	5.8	2.2	9.8	3.0	1.2	4.8
TE: Social Studies Education	6.1	3.2	9.4	3.0	1.6	4.4
TE: Vocational Education	0.9	1.0	0.8	0.5	0.6	0.3
TE: Drama and Dance Educ.	1.3	0.5	2.1	0.7	0.3	1.1
TE: Lang. Arts, Childs Lit	9.9	2.9	17.8	5.5	1.7	9.5
TE: Other, Indeterminable	0.9	0.2	1.6	0.4	0.1	0.7
Teaching Eng. as 2nd Lang.	0.2	---	0.3	0.1	<0.1	0.2
Student Teach., Practicums	12.8	7.5	18.8	6.5	3.8	9.3
Educ.: Indeterm., Missing	7.1	4.2	10.4	3.9	2.5	5.3

14: Engineering

Engineering: General	3.0	5.4	0.2	2.0	3.7	0.1
Aerospace, Aeronaut. Engin.	0.8	1.4	<0.1	0.4	0.7	<0.1
Agricultural Engineering	0.7	1.2	0.1	0.4	0.7	0.1
Architectural Engineering	0.8	1.4	0.2	0.5	0.9	0.1
Bio/Biomedical Engineering	0.4	0.7	0.1	0.2	0.3	<0.1
Chemical Engineering	1.0	1.8	0.1	0.5	0.9	<0.1

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Civil, Transport. Engineer	1.9%	3.5%	0.2%	1.1%	2.1%	0.1%
Computer Engineering	2.3	4.0	0.3	1.3	2.4	0.1
Elect, Electron, Comm. Engin	4.7	8.6	0.0	2.8	5.4	0.2
Engin. Mechans, Stat, Dynam	5.0	9.2	0.3	3.0	5.7	0.3
Engin. Physics, Appl Phys	1.6	2.6	0.5	1.4	2.3	0.4
Engineering Science	0.5	0.8	<0.1	0.2	0.4	<0.1
Envir./Envir. Health Engin.	0.6	0.9	0.2	0.3	0.5	0.1
Geolog. & Geophysical Engin	0.2	0.4	---	0.1	0.2	---
Industrial Engineering	1.1	2.0	0.1	0.8	1.4	0.1
Engin. Economics, Management	1.9	3.6	0.1	1.0	2.0	<0.1
Materials Engineering	2.8	5.0	0.3	1.6	2.9	0.2
Mech. Engin., Engin. Thermo	3.4	6.2	0.2	1.9	3.5	0.1
Metallurgical Engineering	0.2	0.4	0.1	0.2	0.3	0.1
Mining & Mineral Engineering	0.1	0.2	<0.1	0.1	0.1	<0.1
Naval Arch. & Marine Engin.	0.4	0.7	---	0.2	0.3	<0.1
Nuclear Engineering	0.4	0.7	0.1	0.2	0.3	<0.1
Ocean Engineering	0.1	0.3	---	0.1	0.2	---
Petroleum Engineering	0.1	0.3	<0.1	0.1	0.2	<0.1
Surveying/Mapping Sciences	1.2	2.0	0.2	0.8	1.5	0.1
Systems Engineering	0.6	1.1	<0.1	0.3	0.6	<0.1
Engin. Graphics/Drawing	3.1	5.5	0.3	2.6	4.7	0.3
Engin. Math & Statistics	1.2	2.2	0.1	0.7	1.3	0.1
Engineering: Other, Unknown	1.9	3.2	0.4	1.2	2.1	0.2

15: Engineering Technologies

Arch. Design/Const. Technol	1.1	1.5	0.6	1.1	1.9	0.4
Archit. Inter. Des. Technol	0.2	0.1	0.3	0.2	0.1	0.2
Civil Technology	0.7	1.4	0.1	0.8	1.5	0.1
Drafting and Design Technol	1.0	1.8	0.1	1.1	2.1	0.2
Surveying/Mapping Technol	0.3	0.6	<0.1	0.6	1.0	0.1
Computer Technology	0.6	1.1	0.1	1.0	1.8	0.2
Electrical Technology	1.7	3.3	<0.1	2.4	4.4	0.2
Electronic Technology	2.0	3.7	0.1	2.4	4.6	0.1
Elect/Electronic Tech: Other	0.3	0.6	---	0.3	0.5	---
Electromechanical Technology	0.6	1.0	0.1	0.6	1.0	0.1
Instrumentation Technology	0.9	1.6	0.2	0.7	1.3	0.1
Heating & Cooling Technols.	0.3	0.6	0.1	0.4	0.7	<0.1
Air Pollut Control Technol	0.3	0.4	0.2	0.2	0.3	0.2
Sanitation Technology	0.2	0.2	0.1	0.1	0.2	0.1
Water & Wastewater Technol	0.6	0.9	0.2	0.4	0.8	0.1
Envir. Control Technols: Oth	0.6	1.1	0.1	0.4	0.7	<0.1
Industrial Technology	0.5	0.9	<0.1	0.6	1.1	<0.1
Manufacturing Technology	0.8	1.3	0.2	0.7	1.3	0.1
Plastic Technology	0.4	0.6	<0.1	0.2	0.4	<0.1
Welding Technology	0.4	0.7	---	0.6	1.3	<0.1
Indust. Produc. Tech: Other	0.4	0.6	0.2	0.3	0.5	0.1
Occupat/Industrial Safety	0.6	1.0	0.1	0.6	1.1	0.1

	All	Men	Wom	All	Men	Wom
	<u>BA's</u>	<u>BA's</u>	<u>BA's</u>	<u>>10</u>	<u>>10</u>	<u>>10</u>
				<u>Cred</u>	<u>Cred</u>	<u>Cred</u>
Quality Control Technology	0.3‡	0.5‡	<0.1‡	0.3‡	0.5‡	0.1‡
Aeronautical Technology	0.5	0.9	<0.1	0.4	0.8	0.1
Automotive Technology	0.6	1.1	0.1	0.6	1.1	0.1
Mechanical Design Technol	0.8	1.4	---	0.7	1.2	0.1
Mechanical Technols: Other	0.4	0.8	---	0.4	0.7	<0.1
Mining Technology	<0.1	0.1	---	0.1	0.1	---
Petroleum Technology	0.1	0.1	---	<0.1	0.1	---
Construction Technology	0.8	1.3	0.2	0.8	1.5	0.1
Engineering Technol: Gen.	0.3	0.4	0.1	0.3	0.6	<0.1
Engin. Tech.: Oth, Unknown	0.5	0.9	---	0.6	1.1	<0.1

16: Foreign Languages

African Languages	0.1	0.1	0.2	0.1	<0.1	0.2
Chinese: Intro & Intermed	0.5	0.3	0.7	0.3	0.2	0.3
Japanese: Intro & Intermed	0.3	0.2	0.4	0.2	0.2	0.3
Chinese: Advanced, Lit, etc.	0.1	0.1	0.1	<0.1	<0.1	<0.1
Japanese: Adv., Lit, etc.	0.1	---	0.1	<0.1	<0.1	0.1
Other Asiatic Languages	<0.1	---	<0.1	<0.1	<0.1	<0.1
Russian: Intro & Intermed	1.0	0.9	1.0	0.7	0.7	0.6
Other Slavic Languages	0.1	<0.1	0.1	0.1	<0.1	0.1
Russian: Advanced, Lit, etc.	0.4	0.3	0.5	0.2	0.2	0.3
German: Intro & Intermediate	9.1	9.4	8.7	5.4	5.9	5.0
Scandinavian Languages	0.3	0.2	0.4	0.2	0.1	0.2
Dutch	0.1	0.1	<0.1	<0.1	<0.1	0.1
German: Advanced, Lit., etc.	1.8	1.6	2.0	0.9	0.9	1.0
Scandinavian Langs: Advanced	0.1	<0.1	0.1	<0.1	<0.1	0.1
Germanic Languages: Other	<0.1	---	0.1	<0.1	<0.1	<0.1
Greek: Classical	1.0	1.2	0.8	0.5	0.7	0.4
Greek: Modern	0.1	<0.1	0.2	0.1	<0.1	0.1
Indic Languages	0.1	<0.1	0.1	<0.1	<0.1	<0.1
French: Intro & Intermediate	13.8	9.3	18.9	8.5	5.7	11.4
Italian: Intro & Intermed	1.9	1.7	2.2	1.2	1.0	1.4
Latin	1.3	1.3	1.3	0.7	0.8	0.7
Portuguese: Intro & Intermed	0.3	0.1	0.6	0.2	<0.1	0.4
Spanish: Intro & Intermed	17.9	15.4	20.8	12.3	10.2	14.3
French: Advanced, Lit., etc.	3.0	1.6	4.5	1.5	0.8	2.2
Italian: Adv., Lit., etc.	0.2	0.2	0.1	0.1	0.1	0.1
Portuguese: Adv., Lit, etc	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Spanish: Adv., Lit., etc.	2.8	1.7	4.0	1.6	1.0	2.3
Spanish for Native Speakers	0.2	0.2	0.1	0.2	0.2	0.1
Native American Languages	0.1	<0.1	0.2	0.1	<0.1	0.1
Arabic: Intro & Intermediate	0.2	0.2	0.1	0.1	0.1	<0.1
Hebrew: Intro & Intermediate	0.8	0.8	0.7	0.4	0.4	0.3
Arabic: Advanced, Lit., etc.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hebrew: Advanced, Lit., etc.	0.2	0.3	---	0.1	0.1	---
Foreign Langs: Other/Indet	0.7	0.3	1.1	0.4	0.2	0.5

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
17: Allied Health						
Dental Assisting	0.2%	---	0.4%	0.3%	<0.1%	0.6%
Dental Hygiene	0.3	---	0.6	0.3	---	0.7
Dental Lab Technology	0.2	0.1	0.3	0.2	<0.1	0.5
Oral/Dental Radiology	0.1	<0.1	0.2	0.2	<0.1	0.3
Dental Services, Other	0.1	---	0.1	0.2	---	0.3
Cardiovascular Technology	0.1	0.1	0.2	0.2	0.2	0.2
Emergency Medical: Ambulance	0.2	0.1	0.3	0.3	0.3	0.3
Emergency Medical: Paramedic	0.9	0.6	1.2	0.8	0.7	0.9
Radiologic (Med) Technology	0.3	0.3	0.3	0.5	0.2	0.8
Respiratory Therapy Technol	<0.1	<0.1	---	0.1	0.1	0.1
Surgical Technology	0.1	0.1	0.1	0.1	0.1	0.1
Diagnost/Treat. Servs: Oth	0.1	0.1	<0.1	0.1	0.1	0.1
Blood Bank/Hematology Tech	0.4	0.2	0.7	0.3	0.1	0.6
Chemistry Technology	0.4	0.3	0.5	0.3	0.2	0.5
Clinical Animal Technology	<0.1	0.1	---	0.1	<0.1	0.1
Medical Laboratory Tech	0.1	0.1	0.5	0.4	0.1	0.8
Medical Technology	0.5	0.1	1.0	0.4	0.1	0.8
Microbio Tech/Applied Micros	0.5	0.4	0.6	0.5	0.3	0.7
Medical Lab Technols: Other	0.1	<0.1	0.1	0.1	<0.1	0.2
Alcohol/Drug Abuse Treatment	1.8	1.2	2.4	1.0	0.8	1.2
Community Health/Hygiene	5.1	4.2	6.1	3.9	3.4	4.5
Mental Health Assisting	0.1	<0.1	0.2	0.1	<0.1	0.2
Mental Health Technology	0.2	0.1	0.4	0.2	0.1	0.4
Rehabilitation Counseling	0.3	0.2	0.6	0.2	0.1	0.3
Population/Family Planning	0.3	0.3	0.4	0.2	0.2	0.2
Sign Lang. Interp./AMESLAN	0.7	0.1	1.3	0.6	0.1	1.0
Ment. Health/Human Servs:Oth	0.6	0.2	1.1	0.5	0.2	0.7
Medical Assisting	0.1	0.1	0.1	0.3	0.1	0.5
Medical Office Management	0.1	---	0.1	0.4	<0.1	0.7
Medical Records Technology	0.1	---	0.2	0.3	<0.1	0.6
Pharmacy Assisting	0.1	0.1	<0.1	0.1	<0.1	0.1
Allied Health Servs.: Other	0.2	0.2	0.2	0.2	0.1	0.2
Pract Nursg, Nurse Assist.	0.2	0.1	0.4	0.6	0.1	1.1
Ophthalmic Servs/Technol	0.1	0.1	<0.1	0.1	0.1	0.1
Art Therapy	0.1	<0.1	0.2	0.1	<0.1	0.1
Kinesiology, Exercise Physio	4.7	4.0	5.4	2.7	2.4	3.1
Music Therapy	0.2	0.2	0.2	0.1	0.1	0.1
Occupational Therapy	0.3	---	0.7	0.2	---	0.5
Physical Therapy	0.5	0.3	0.8	0.4	0.2	0.6
Recreational Therapy	0.5	0.2	0.9	0.4	0.2	0.6
Respiratory Therapy	<0.1	---	<0.1	0.1	<0.1	0.1
Rehabil. Servs.:Other	0.8	0.3	1.4	0.5	0.2	0.8
Health Servs. & Sci.: Gen	4.0	2.5	5.7	3.6	2.4	4.8
HPER: Intro., General	3.0	3.3	2.7	1.9	2.2	1.5
Athletic Injuries/Training	1.8	2.5	1.0	1.1	1.5	0.6
Adaptive Physical Education	1.7	1.8	1.6	<0.1	0.9	0.8

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Medical Terminology	0.6‡	0.5‡	0.7‡	0.9‡	0.3‡	1.6‡
Allied Health: Other	0.9	0.7	1.0	0.6	0.5	0.8

18: Health Sciences

Audiology	1.5	0.3	2.7	0.8	0.2	1.4
Speech Pathology	2.6	0.7	4.7	1.4	0.4	2.4
Speech-Lang Pathol/Audiology	1.5	0.3	2.9	0.8	0.2	1.5
Audiol & Speech Path: Other	1.1	0.3	2.0	0.5	0.2	1.0
Clinical Anatomy	0.7	0.4	1.0	0.5	0.2	0.8
Clinical/Medic. Biochemistry	0.6	0.7	0.4	0.3	0.3	0.2
Clin Microbio/Med Bacteriol	1.4	1.0	1.9	1.0	0.5	1.4
Clinical Pathology	0.5	0.4	0.5	0.3	0.2	0.3
Clinical Physiology	0.8	0.8	0.8	0.5	0.5	0.6
Clinical Health Sci: Other	0.5	0.4	0.6	0.3	0.3	0.4
Chiropractic	0.1	0.1	0.1	<0.1	0.1	<0.1
Dentistry: General	0.1	0.1	0.1	0.1	0.1	0.2
Prevent. Dent./Dent Pub Hlth	0.3	<0.1	0.5	0.3	<0.1	0.5
Endodontics	---	---	---	<0.1	---	<0.1
Oral/Maxial Facial Surgery	---	---	---	<0.1	---	<0.1
Oral Pathology	0.2	---	0.4	0.2	---	0.4
Othodontics	---	---	---	<0.1	---	<0.1
Pedodontics	---	---	---	<0.1	---	<0.1
Periodontics	0.2	---	0.4	0.2	---	0.3
Dentistry: Other	0.2	---	0.3	0.1	<0.1	0.2
Health Servs./Hospital Admin	1.0	0.8	1.2	0.6	0.4	0.8
Health Care Planning	0.4	0.3	0.6	0.3	0.2	0.4
Medical Records Admin	<0.1	---	0.1	<0.1	0.1	0.1
Health Servs Admin: Other	0.4	0.2	0.5	0.2	0.1	0.3
Medical Laboratory	0.1	0.1	0.1	0.1	0.1	<0.1
Medicine: General	0.5	0.2	0.9	0.4	0.1	0.7
Anesthesiology	0.1	<0.1	0.2	0.1	<0.1	0.2
Dermatology	0.1	0.1	<0.1	0.1	<0.1	0.1
Emergency Medicine	0.1	0.1	---	0.1	0.1	<0.1
Family Practice	0.1	0.2	<0.1	<0.1	0.1	<0.1
Immunology	1.4	0.8	2.0	0.7	0.4	1.0
Internal Medicine	0.1	---	0.2	0.1	<0.1	0.1
OBGYN	0.1	0.2	0.1	0.1	0.1	0.1
Opthamology	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Orthopedic	0.1	0.1	0.1	0.1	<0.1	0.1
Pathology	0.2	0.1	0.4	0.1	0.1	0.2
Pediatrics	0.2	0.2	0.2	0.1	0.1	0.2
Physical Medicine/Rehab	0.1	<0.1	0.2	<0.1	<0.1	0.1
Preventive Medicine	0.1	0.1	0.1	0.1	0.1	0.1
Psychiatry	0.3	0.3	0.4	0.2	0.1	0.3
Neurology	0.2	0.1	0.3	0.1	0.1	0.2
Radiology	0.2	0.1	0.2	0.2	0.1	0.2
Surgery	0.3	0.3	0.3	0.2	0.1	0.2

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Hematology	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%
Medicine: Other	0.5	0.4	0.5	0.3	0.3	0.4
Nursing: General	3.8	0.3	7.8	4.9	0.6	9.4
Maternal/Pediatric Nursing	1.9	0.1	4.0	2.6	0.2	5.1
Medical/Surgical Nursing	1.4	0.1	2.9	2.1	0.2	4.1
Nursing Administration	0.7	0.1	1.4	0.4	0.1	0.8
Psychiat/Mental Hth Nursing	2.1	0.1	4.4	2.3	0.2	4.5
Pub/Commun Health Nursing	2.8	1.1	4.7	1.6	0.6	2.6
Nursing: Other, Indeterm.	2.7	0.1	5.6	2.8	0.2	5.5
Optometry	0.1	0.1	<0.1	<0.1	0.1	<0.1
Osteopathic Medicine	0.1	0.1	---	<0.1	<0.1	---
Pharmacy	1.7	1.6	1.8	1.0	0.9	1.1
Podiatry	<0.1	<0.1	---	<0.1	<0.1	---
Public Health Lab Sci	0.5	0.6	0.4	0.3	0.3	0.3
Epidemiology	0.6	0.5	0.7	0.3	0.2	0.4
Pub Health Practice/Mgmt	0.4	0.4	0.4	0.3	0.3	0.3
Public Health: Other	0.3	0.1	0.4	0.2	0.1	0.3
Veterinary Medicine	0.4	0.4	0.4	0.3	0.3	0.2
Clinic, Clerkship: Unspecif.	0.5	0.4	0.6	0.5	0.4	0.6
Health Sci: Other, Indet.	0.5	0.5	0.4	0.3	0.3	0.4

19: Home Economics

Home Economics: General	1.4	0.3	2.8	0.9	0.1	1.7
Business Home Ec/Fam Finance	1.2	0.4	2.1	0.7	0.3	1.1
HE: Family & Commun. Servs	0.2	0.1	0.3	0.1	<0.1	0.2
Family/Consumer Mgmt.: Gen	1.1	0.4	1.9	0.7	0.3	1.1
HE: Consumer Science	3.6	3.6	3.6	2.1	2.2	2.0
HE: Food Sci/Nutrit.: Gen	3.8	1.4	6.5	3.1	1.0	5.3
HE: Food & Food Sci.	0.2	1.1	3.0	1.2	0.7	1.8
Dietetics/Human Nutr. Serv.	1.2	0.2	2.3	0.8	0.1	1.5
HE: Human Nutrition	5.9	1.9	10.5	4.7	1.5	8.0
HE: Food Sci/Nutrit.: Other	0.2	0.1	0.2	0.1	0.1	0.1
HE: Human Envir/Housing: Gen	0.5	0.3	0.9	0.3	0.2	0.4
Household Equipment & Furn.	0.7	0.1	1.3	0.4	0.1	0.7
HE: Housing	0.8	0.2	1.5	0.5	0.1	0.8
HE: Indiv/Family Devel.	5.1	2.3	8.3	3.5	1.7	5.5
HE: Family Counseling	0.4	0.3	0.6	0.4	0.2	0.5
HE: Family Relations	6.0	3.1	9.3	4.0	2.1	5.9
HE: Gerontolog. Servs.	0.2	0.2	0.3	0.1	0.1	0.2
HE: Indiv/Family Dev.: Oth	0.4	0.4	0.5	0.2	0.2	0.3
Textiles & Clothing: Gen	1.6	0.2	3.3	1.3	0.2	2.5
Fashion Design	0.7	<0.1	1.5	0.7	0.1	1.4
Textile Science	1.0	0.1	2.0	0.7	0.1	1.3
Textiles & Clothing: Other	0.4	0.1	0.7	0.3	0.1	0.6
Home Economics: Oth, Indet.	0.9	0.2	1.6	0.2	0.1	0.9

	All	Men	Wom	All	Men	Wom
	<u>BA</u>	<u>BA</u>	<u>BA</u>	<u>>10</u>	<u>>10</u>	<u>>10</u>
	<u>Cred</u>	<u>Cred</u>	<u>Cred</u>	<u>Cred</u>	<u>Cred</u>	<u>Cred</u>

20: Vocational Home Economics

VHE: Consum/Homemaker: Gen.	0.2‡	0.1‡	0.4‡	0.2‡	0.1‡	0.2‡
VHE: Child Development/Care	7.6	1.9	14.0	5.7	1.4	10.2
VHE: Clothing & Textiles	0.9	<0.1	1.9	0.9	<0.1	1.7
VHE: Consumer Education	0.6	0.4	0.8	0.4	0.3	0.5
VHE: Family/Indiv Health	1.1	0.4	1.9	0.7	0.4	1.2
VHE: Family Liv/Parenthood	2.9	1.7	4.3	2.2	1.1	3.4
VHE: Food & Nutrition	1.1	0.2	2.2	0.8	0.2	1.4
VHE: Home Management	1.1	<0.1	2.3	0.7	0.1	1.3
VHE: Housing/Furnishings	1.1	0.2	2.2	0.8	0.1	1.4
VHE: Child Care Servs: Gen	0.4	<0.1	0.9	0.2	<0.1	0.9
VHE: Child Care Management	0.1	---	0.3	0.1	---	0.1
VHE: Child Care Servs.: Oth	0.1	<0.1	0.1	0.1	<0.1	0.1
Clothing Prod/Servs: Gen	0.6	0.1	1.1	0.4	---	0.7
Commercial Garment Construc.	0.4	0.1	0.8	0.3	<0.1	0.6
Custom Tailor/Alteration	0.3	---	0.6	0.2	---	0.4
Fashion/Fabric Coordinat.	0.2	0.1	0.3	0.3	0.1	0.4
Food Production/Mgmt/Servs	0.9	0.5	1.4	0.7	0.5	0.8
Baking	0.1	<0.1	0.1	0.2	0.2	0.1
Chef/Cook	0.1	<0.1	0.3	0.3	0.3	0.3
Food Serv & Catering	0.8	0.5	1.2	0.7	0.7	0.8
Food Product/Mgmt/Serv: Oth	0.2	0.1	0.3	0.2	0.3	0.2
Floral Design	0.3	0.3	0.4	0.3	0.2	0.4
Home/Interior Decorating	0.4	---	0.8	0.3	---	0.5
Vocat. Home Economics: Oth	0.3	0.1	0.5	0.2	0.2	0.3

21: Industrial Arts

Industrial Arts: General	0.4	0.7	0.2	0.3	0.6	0.1
IA: Construction	0.3	0.4	0.1	0.3	0.4	0.1
IA: Drafting & Design	0.5	0.8	0.1	0.5	0.9	<0.1
IA: Electric/Electronics	0.1	0.3	---	0.7	1.2	0.1
IA: Energy, Power, Transp	0.4	0.6	0.1	0.3	0.5	0.1
IA: Bas. Graph/Mechan Draw	0.5	0.6	0.5	0.5	0.7	0.2
IA: Manufacturing/Materials	0.3	0.6	---	0.3	0.5	<0.1

22: Law

Law (torts, contracts, etc)	6.1	8.8	2.9	4.6	6.4	2.6
Legal Assisting	0.3	0.3	0.3	0.4	0.3	0.6
Law: Other	4.1	5.4	2.5	2.8	3.7	1.7

23: English/Letters

Literature: General/Intro	30.9	29.2	32.9	20.5	19.7	21.4
Poetry: General, Intro	3.8	2.7	5.0	2.4	1.8	3.0
Fiction: General, Intro	11.8	9.8	13.9	7.3	6.3	8.4

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Drama: General, Intro	4.0%	3.0%	5.1%	2.5%	1.9%	3.2%
Non-Fict. Prose, Biography	1.0	0.7	1.3	0.7	0.5	0.8
Classical Literature	6.3	5.4	7.3	3.4	3.1	3.7
The Bible as Literature	1.5	0.9	2.1	0.9	0.6	1.2
Compar. Lit.: European	5.7	4.8	6.7	3.0	2.5	3.6
Compar. Lit.: Non-Western	1.1	0.7	1.5	0.6	0.5	0.8
Freshman Composition	72.7	73.7	71.5	63.3	64.2	62.2
Spoken/Writ Eng, Adv Gramm	1.9	2.0	1.8	1.9	1.9	1.9
Creative Writing	7.2	6.8	7.7	4.6	4.4	4.8
Linguis.: Gen. & Sub-Fields	8.8	4.8	13.2	4.9	2.7	7.2
American Literature	23.0	20.3	26.0	13.9	12.8	1.5
Afro-American Literature	1.2	0.9	1.5	0.9	0.7	1.1
Engl. Liter.: All Periods	16.6	13.2	20.4	9.9	8.3	11.6
Shakespeare	7.1	4.5	10.0	3.8	2.5	5.3
Pub Speaking, Debate	15.7	17.5	13.6	10.9	12.0	9.7
Voice & Articulation	2.6	1.6	3.8	1.8	1.2	2.3
Tech and Business Writing	7.7	10.3	4.8	6.4	8.2	4.5
English as a Second Language	0.3	0.4	0.1	0.2	0.2	0.2
Criticism, Literary History	2.0	1.7	2.4	1.0	0.9	1.1
Remedial English: General	9.7	10.0	9.4	13.1	12.9	13.4
Basic Reading, Reading Impr	5.7	5.3	6.3	7.1	6.8	7.5
Remedial/Basic Speech	2.8	2.6	2.9	2.0	2.0	2.0
Other Determ Lit. Topics	6.0	5.3	6.7	3.7	3.3	4.2
Science Fiction, Fantasy	1.7	1.8	1.5	1.1	1.3	0.8
Folklore, Mythology (Gen.)	2.1	1.4	2.9	1.1	0.8	1.4
Lit. & Film/Film as Lit	1.0	0.9	1.1	0.5	0.5	0.6
Letters: Missing, Indeterm	10.5	9.9	11.1	8.7	8.1	9.3

24: Liberal/General Studies

Liberal Arts & Sciences	1.6	1.7	1.4	0.9	1.0	0.7
General Studies	1.0	0.8	1.2	0.8	0.7	1.0

25: Library Science

Library/Archival Sci.: Gen	0.6	0.5	0.7	0.6	0.5	0.8
Archival Science	0.1	0.2	0.1	0.1	0.1	0.1
Library Science	1.7	1.4	2.1	1.1	1.0	1.2
Museology	0.3	0.1	0.4	0.1	0.1	0.2
Library/Archival Sci.: Other	0.1	0.1	0.1	0.1	0.1	0.1

26: Biological Sciences

Biology: General	46.7	43.8	50.0	34.6	33.2	36.1
Human Biology	3.2	2.7	3.8	2.7	1.8	3.5
Biochemistry	7.3	7.9	6.5	3.8	4.2	3.5
Biophysics	0.3	0.6	0.1	0.2	0.3	0.1
Botany: General	8.9	9.8	7.9	5.9	6.7	5.0

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Plant Pathology	0.7%	0.9%	0.4%	0.4%	0.5%	0.3%
Plant Physiology	1.5	2.0	0.9	0.7	1.1	0.4
Plant Morphology	0.4	0.5	0.3	0.2	0.3	0.1
Plant Taxonomy/Systematics	1.4	1.5	1.2	0.8	1.0	0.6
Botany: Other	1.3	1.5	1.1	0.8	0.8	0.8
Cell Biology	4.5	5.2	3.7	2.4	2.8	2.0
Molecular Biology	1.1	1.4	0.7	0.5	0.7	0.4
Microbiology	11.0	9.1	13.1	8.1	5.6	10.7
Bacteriology	2.3	2.0	2.6	1.3	1.0	1.6
Anatomy: Plant & Animal	7.5	7.1	8.0	4.8	4.2	5.4
Biometrics, Biostatistics	1.1	1.2	1.1	0.6	0.6	0.5
Ecology	9.4	11.2	7.5	5.4	6.7	4.0
Embryology, Development Bio	3.8	4.7	2.7	1.9	2.4	1.4
Endocrinology	0.6	0.8	0.5	0.3	0.4	0.3
Histology	1.4	1.7	1.0	1.0	1.1	0.9
Aquatic/Marine Bio, Limnol.	1.7	2.4	1.0	1.0	1.4	6.4
Neurosciences	0.7	0.6	0.9	0.3	0.3	0.4
Parasitology	1.6	1.8	1.3	0.9	1.0	0.8
Toxicology	0.6	0.9	0.2	0.3	0.5	0.1
Evolution	3.2	2.7	3.8	1.6	1.4	1.9
Field Biol/Botany/Nat Hist	1.7	1.9	1.6	1.0	1.1	0.8
Genetics: Hum, Anim, Plnt	10.5	11.8	9.2	5.6	6.4	4.7
Misc. Spec Life Sci: Other	1.4	1.3	1.4	0.8	0.8	0.8
Zoology: General	12.8	14.1	11.4	8.2	9.3	7.0
Entomology	2.0	2.2	1.8	1.2	1.3	1.0
Pathology: Human & Animal	0.9	0.9	1.0	0.6	0.5	0.6
Pharmacology: Human & Animal	2.1	1.5	2.8	1.7	0.9	2.6
Physiology: Human & Animal	10.3	9.1	11.6	6.1	5.6	6.6
Animal Behavior, Ethology	1.8	1.7	1.9	0.9	0.8	0.9
Ornithology	0.6	0.5	0.7	0.3	0.3	0.3
Zoology: Other	1.6	2.1	1.1	1.0	1.2	0.7
Anat & Physio/Applied Anat	8.2	4.9	11.9	8.6	3.8	13.6
Plants & Envir/Civilization	1.0	1.0	1.0	0.6	0.6	0.6
Pathophysiology/Intro Disease	0.7	0.3	1.2	0.6	0.2	0.9
Organic Biochem/Physiol Chem	1.2	0.8	1.8	0.8	0.5	1.2
Human Growth & Develop [Bio]	4.6	2.8	6.5	3.5	2.1	5.1
Life Sci: Missing, Indeterm	5.2	5.6	4.7	3.1	3.3	2.8

27: Mathematics

Pre-Collegiate Math: General	14.5	12.1	17.2	12.6	11.6	13.6
Arithmetic	1.8	1.0	2.8	2.0	1.5	2.6
Pre-Colleg. Algebra	8.3	9.4	7.2	10.3	12.0	8.4
Plane Geometry	1.5	1.5	1.5	1.3	1.6	0.9
Developmental Math: Other	3.1	2.6	3.6	2.8	2.5	3.0
Liber Arts Math/Int Col Math	9.9	9.1	10.9	8.1	7.8	8.5
Finite/Discrete Math	6.1	7.1	4.9	4.1	5.0	3.1
College Algebra	18.4	22.2	14.1	15.1	19.6	10.3

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Pre-Calculus, Analyt. Geom	8.2%	9.7%	6.6%	5.7%	7.3%	4.0%
Statistics, Probability	23.1	26.6	19.1	13.7	16.4	10.9
Calculus, Different Equat	30.4	41.4	18.0	18.9	27.0	10.5
Calculus for Life Sci, Econ	3.3	4.5	1.8	1.9	2.8	0.9
Advanced College Math Topics	5.1	6.3	3.8	2.7	3.5	1.8
Technical/Vocational Math	1.2	1.8	0.6	3.5	5.4	1.6
Business Math: Pre-College	2.2	2.1	2.3	5.8	4.2	7.5
Business Math: Collegiate	3.8	4.9	2.5	3.1	3.9	2.3
Number Systems/Structures	1.2	0.5	2.0	0.7	0.3	1.1
Math: Missing, Indeterm	7.9	8.9	6.8	6.6	8.0	5.1

28 and 29: Military Science/Technol

Air Force Science	1.2	2.1	0.2	0.8	1.3	0.2
Coast Guard Science	---	---	---	<0.1	<1.0	---
Military Sci (Army)	1.9	3.1	0.5	1.2	2.0	0.3
Naval Science (Navy, Marines)	1.0	1.8	0.1	0.5	0.9	0.1
Military Science: Other	0.9	1.5	0.1	0.5	1.0	0.1
Military Technologies	0.2	0.4	---	0.1	0.2	---

30: Multi/Interdisciplinary

Gen. Science, Nat. Sci.	4.4	4.0	4.8	3.3	2.9	3.6
Gen. Laboratory, Instrum.	0.3	0.3	0.3	0.2	0.2	0.1
Intro. Technol., Appl Sci.	0.6	0.9	0.2	0.4	0.8	0.1
Clinical Pastoral Care	0.2	0.4	0.1	0.2	0.3	<0.1
Humanities: General	10.7	10.5	10.9	7.7	7.7	7.7
Humanities & Social Sci	1.7	1.9	1.6	1.1	1.2	1.0
Humanities & Arts	1.4	1.1	1.8	1.1	1.0	1.2
Popular Culture	0.9	0.9	0.9	0.6	0.6	0.7
Peace Studs, Conflict Resol.	1.1	1.4	0.8	0.7	0.8	0.5
Women's Studies	6.0	1.6	11.0	3.5	0.9	6.2
Future Studies, Futuristics	0.7	0.7	0.7	0.4	0.4	0.4
Sci, Technol, & Society	4.2	4.4	4.0	2.5	2.7	2.2
Environmental Studies/Sci	7.5	8.3	6.7	4.8	5.5	4.0
Sports/Leisure Studies	2.0	2.2	1.8	1.1	1.2	1.0
Interdisc. Studies: Other	2.2	2.3	2.1	1.3	1.5	1.2

31: Recreation

Recreation/Parks: General	1.2	1.3	1.1	0.8	1.0	0.6
Outdoor Recreat, Camp Counsel	2.4	2.4	2.4	1.6	1.7	1.5
Parks/Recreation Managemt	1.4	1.7	1.1	1.0	1.2	0.9
Water Recreation/Safety	0.3	0.3	0.3	0.2	0.2	0.2
Sports Officiating, Referee	1.5	2.0	0.9	1.2	1.7	0.6
Recreat. Leadership/Supervis.	0.5	0.4	0.7	0.4	0.2	0.5
Recreat. Practicum/Fld Exper	0.6	0.6	0.6	0.4	0.4	0.4
Recreat./Parks: Other	0.9	1.3	0.5	0.5	0.7	0.2

	All BAS	Men BAS	Wom BAS	All >10 Cred	Men >10 Cred	Wom >10 Cred
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32: Basic Skills

Basic Skills: General	0.3%	0.2%	0.5%	0.3%	0.3%	0.3%
Academic/Intellect. Skills	1.9	2.0	1.9	2.0	2.0	2.1
Job Seeking/Changing Skills	1.1	0.8	1.3	1.7	1.3	2.2
Career Exploration/Orient	0.4	0.3	0.5	0.4	0.4	0.4
Typing as Basic Skill	1.7	1.5	1.9	1.2	1.0	1.5

34: Health-Related Activities

Health/Phys. Practices: Gen	16.1	13.8	18.7	13.9	12.6	15.3
Sex/Birth-Relat Health Pract	1.0	1.0	0.9	0.7	0.7	0.7
Mental Hygiene	1.4	0.8	2.1	0.8	0.5	1.2
Aerobics, Jogging, Condit,	12.0	13.4	10.3	9.8	11.2	8.3
First Aid, Life-Saving, etc.	12.0	11.7	12.3	9.4	9.4	9.4
Drug/Alcohol Abuse Prevent.	1.9	1.5	2.3	1.1	0.9	1.3
Adapted Physical Education	0.4	0.5	0.4	0.3	0.3	0.2

35: Interpersonal Skills

Interpers Skills, Appl Psych	3.9	3.2	4.6	4.8	4.4	5.2
Relations: Love, Sex, Job	1.7	1.2	2.2	1.2	0.8	1.6
Assertiveness, Leadership	0.8	1.0	0.6	0.6	0.7	0.5

36: Leisure and Recreational Activities

Leisure & Recreat Activs: Gen	1.8	1.8	1.9	1.4	1.4	1.4
Leisure & Recreat. Crafts	0.6	0.2	1.0	0.4	0.2	0.6
Games	1.3	1.2	1.5	1.2	1.1	1.2
Physical Educat Activities	66.5	65.2	67.9	53.4	53.8	53.0
Self-Defense, Karate, Judo	3.7	4.0	3.4	3.1	3.3	2.8
Equestrian Activities	0.9	0.4	1.4	0.7	0.3	1.1
Yoga	1.0	0.5	1.6	0.8	0.3	1.3
Scuba/Skin Diving	1.6	2.1	0.9	1.2	1.7	0.6
Fishing, Fly-Casting	0.4	0.8	<0.1	0.2	0.4	0.1
Riflery, Pistol (Non-Military)	0.5	0.6	0.3	0.4	0.5	0.2
Varsity Ath.: Major Sports	1.4	2.2	0.5	1.1	1.7	0.4
Varsity Ath.: Minor Sports	1.4	2.0	0.7	1.1	1.7	0.5
Recreat/Leisure Activs: Oth	0.9	<0.1	1.0	0.6	0.6	0.6

37: Personal Awareness

Self-Awareness, Human Potent	2.3	2.1	2.5	2.8	2.3	3.4
Coping Skills	0.6	0.6	0.7	0.5	0.4	0.5
Personal Decision-Making	0.5	0.3	0.7	0.4	0.3	0.4
Pers. Appearance, Charm, etc.	1.2	0.3	2.3	1.7	0.2	3.2
Personal Values	0.3	0.2	0.4	0.2	0.2	0.2

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
<u>3801: Philosophy</u>						
Intro. Phil, Phil Problems	22.8%	24.7%	20.6%	15.2%	16.9%	13.4%
Ethics, Moral Philosophy	10.5	11.0	9.8	6.6	7.0	6.0
Logic, Formal Reasoning	12.5	14.6	10.1	7.6	9.4	5.7
Aesthetics, Phil. of Art	1.4	1.2	1.7	0.8	0.8	0.8
Metaphysics, Epistemology	1.9	2.5	1.3	1.0	1.4	0.7
Philosophy of Language	0.9	1.2	0.6	0.5	0.6	0.3
Hist. of Philosophy: General	1.6	1.8	1.5	0.9	1.1	0.7
Ancient & Med. eval Phil	1.8	2.2	1.4	1.1	1.3	0.8
Phil: Rennais. through 19th	1.5	1.8	1.1	0.8	1.0	0.6
Contemp. Phil: Analyt, Exist	2.1	2.3	1.8	1.0	1.3	1.0
Non-Western Philosophy	0.9	0.9	0.8	0.5	0.5	0.5
Philosophy of Education	1.7	0.8	2.7	0.9	0.6	1.3
Phil. of Science, Sci. Meth	1.5	2.0	0.9	0.8	1.1	0.4
Philosophy of Religion	1.8	2.0	1.5	1.1	1.2	0.9
Philos.: Indeterm., Missing	10.2	11.5	8.8	6.3	7.1	5.4

3802: Religion

Religion: Gen, Compar Topics	12.4	11.9	12.9	7.5	7.4	7.6
Non-Western Religions	2.1	1.5	2.7	1.1	0.8	1.4
Mormon Texts and History	0.5	0.5	0.4	0.5	0.5	0.5
Christianity: all Topics	3.3	3.5	3.0	2.1	2.2	1.9
Judaism: all Topics	0.9	0.7	1.1	0.5	0.4	0.5
Religious Ethics/Morality	0.9	1.0	0.8	0.5	0.6	0.4
Philosophy & Religion: Other	2.0	1.8	2.3	1.1	1.0	1.2

39: Theology

Biblical Langs.: Seminary	0.7	1.1	0.3	0.4	0.6	0.3
Bible Studies	11.7	10.6	12.9	7.8	7.2	8.3
Missionary Studs, Evangelism	0.9	0.9	0.8	0.6	0.7	0.6
Religious Education	1.3	1.7	0.7	0.9	1.2	0.5
Religious Music	0.6	0.6	0.5	0.4	0.4	0.3
Theological Studies	5.2	6.0	4.2	3.3	3.7	2.9
Christian Living/Activities	1.9	1.9	2.0	1.2	1.2	1.3
Theology: Other	1.2	1.4	1.0	0.7	0.7	0.6

40: Physical Sciences

Physical Sci.: General	13.7	12.2	15.4	9.8	9.7	9.9
Astronomy	14.1	16.2	11.7	8.9	10.5	7.2
Astrophysics	0.4	0.7	0.1	0.2	0.4	0.1
Atmospheric Sci., Meteorol	5.0	6.5	3.3	3.0	4.2	1.8

	All	Men	Wom	All	Men	Wom
	BAs	BAs	BAs	>10	>10	>10
				Cred	Cred	Cred

4005: Chemistry

Chemistry: General	35.3%	41.1%	28.8%	25.4%	28.8%	21.9%
Analytical Chemistry	5.6	7.1	4.0	3.1	4.0	2.2
Inorganic Chemistry	3.3	4.4	2.1	2.2	2.8	1.6
Organic Chemistry	15.1	18.0	12.0	8.3	10.0	6.5
Pharmaceutical Chemistry	1.0	1.1	0.8	0.5	0.6	0.4
Physical Chemistry	2.9	4.0	1.7	1.4	2.1	0.8
Chemistry: Other Topics	1.7	2.2	1.2	1.0	1.3	0.6
Chem: Research, Indep. Study	0.6	0.9	0.3	0.3	0.4	0.1
Applied Chemistry	2.6	2.9	2.2	1.8	2.0	1.6
Chem. for Nursing/Health	0.5	0.2	0.9	0.5	0.1	0.9
Chem.: Missing, Indeterm.	1.3	1.8	0.7	0.7	1.0	0.5

4006/4007: Geology & Other

Geology: General	16.4	19.0	13.5	10.7	12.8	8.4
Geochemistry	0.2	0.3	0.2	0.2	0.2	0.1
Geophysics & Seismology	1.1	1.7	0.5	0.7	1.0	0.3
Paleontology	1.7	2.3	1.1	0.9	1.3	0.6
Mineralogy, Petrology	1.1	1.8	0.4	0.6	0.9	0.2
Geological Sci.: Other	1.1	1.3	0.8	0.6	0.8	0.4
Metallurgy	0.3	0.6	0.1	0.4	0.6	0.1
Oceanography: Phys & Biol	4.5	5.8	2.9	2.7	3.4	1.9
Earth Science	7.3	6.8	7.7	4.8	4.9	4.7
Misc. Physical Sci.: Other	0.1	0.2	<0.1	0.1	0.1	<0.1

4008: Physics

Physics: General	26.2	35.6	15.7	16.7	23.8	9.2
Atomic/Nuclear Physics	1.3	1.8	0.7	0.6	0.9	0.4
Optics	0.5	0.8	0.3	0.3	0.4	0.1
Acoustics	0.8	1.2	0.4	0.4	0.7	0.2
Thermal Sci/Thermodynamics	2.8	5.2	0.1	1.5	2.8	0.1
Elect & Magnet: Intermediate	1.4	2.3	0.5	0.8	1.3	0.2
Modern Physics	0.9	1.4	0.2	0.4	0.7	0.1
Classical Mechanics	0.7	1.3	0.1	0.5	0.9	0.1
Quantum Physics	0.3	0.4	0.2	0.2	0.3	0.1
Physics: Other, Unknown	1.7	2.8	0.5	1.1	1.7	0.4
Planetary Science	0.4	0.6	0.1	0.2	0.3	0.1
Physical Science: Other	0.6	0.5	0.7	0.4	0.5	0.4

41: Science Technologies

Biological Lab Tech.: All	0.2	0.2	0.3	0.1	0.1	0.1
Nuclear Technologies: All	0.2	0.2	0.1	0.1	0.2	0.1
Chemical Technology	0.2	0.2	0.2	0.2	0.3	0.1
Metallurgical Technology	0.3	0.4	0.1	0.1	0.3	<0.1

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
42: Psychology						
Psychology: Gen., Intro.	69.5%	65.1%	74.5%	56.5%	52.1%	60.9%
Clinical Psychology	2.5	2.1	3.0	1.4	1.2	1.6
Cognitive Psychology	5.4	4.6	6.3	2.9	2.5	3.3
Counseling & Community Psych	1.7	1.4	1.9	1.0	0.9	1.1
Developmental Psych	25.9	15.8	37.4	16.8	10.2	21.7
Experiment Psych, Res Meths	5.1	4.8	5.4	2.8	2.6	2.9
Industrial & Organiz. Psych	2.9	3.5	2.2	1.7	2.2	1.3
Personality Psychology	14.6	11.1	18.6	9.1	7.1	11.1
Abnormal Psychology	14.9	9.9	20.4	8.6	6.2	11.1
Human Sexuality	3.6	2.5	4.9	2.2	1.9	2.6
Physiological Psych	4.0	3.6	4.5	2.2	1.9	2.4
Psycholinguistics	1.3	0.7	2.1	0.6	0.3	1.0
Psychometrics	1.9	1.7	2.2	1.0	0.9	1.1
Psychopharmacology	0.7	0.7	0.6	0.3	0.3	0.3
Quantitative Psych, Stats	3.3	3.2	3.3	1.8	1.8	1.9
Social Psych, Envir. Psych	17.3	15.3	19.5	10.7	9.6	11.8
History of Psychology	1.7	1.6	1.9	0.9	0.9	1.0
Psych Field Work, Internship	0.8	0.7	0.9	0.4	0.4	0.5
Psych Seminars, Readings	3.0	2.6	3.6	1.6	1.4	1.8
Psych: Missing, Indeterm	6.2	5.7	6.8	3.9	3.5	4.3

43: Protective Services

Correctional Administration	0.3	0.4	0.3	0.3	0.3	0.3
Corrects, Penol, Probation	1.7	1.8	1.6	1.3	1.4	1.2
Criminal Just. Admin, Courts	1.4	1.8	0.8	1.4	1.9	0.8
Crim Justice Studies: Gen	2.0	2.6	1.3	1.7	2.3	1.0
Criminalistics, Evidence	1.3	2.0	0.5	1.6	2.5	0.6
Forensic Studies	0.2	0.4	<0.1	0.2	0.3	<0.1
Law Enforce, Gen. Police Train	1.8	2.4	1.2	2.3	3.3	1.3
Law Enforcement Administrat.	1.1	1.7	0.3	1.0	1.7	0.3
Security Services	0.1	<0.1	0.1	0.1	0.2	0.1
Internships, Field Exper	0.5	0.7	0.3	0.4	0.5	0.2
Crimi. Law & Proced.: Police	1.0	1.5	0.5	0.8	1.1	0.5
Police/Community Relations	0.4	0.5	0.3	0.4	0.6	0.2
Traffic Law/Control/Mgmt.	0.3	0.5	0.1	0.6	1.0	0.2
Juvenile Justice/Delinquency	0.9	0.9	1.0	0.9	1.1	0.8
Narcotics, Drug Enforcement	0.1	0.3	<0.1	0.2	0.3	0.1
Criminal Justice: Other	0.4	0.3	0.5	0.3	0.4	0.2
Fire Control and Safety Tech	0.1	0.2	0.1	0.3	0.5	<0.1
Fire Protection Admin.	---	---	---	0.1	0.3	<0.1
Firefighting	<0.1	<0.1	---	0.1	0.2	<0.1
Fire Protection: Other	---	---	---	0.1	0.3	---
Protect. Servs.: Missing	<0.1	---	0.1	<0.1	<0.1	<0.1

	All	Men	Wom	All	Men	Wom
	BAs	BAs	BAs	>10 Cred	>10 Cred	>10 Cred

44: Public Administration/Services

Community Services, Organiz.	1.5%	0.9%	2.1%	1.0%	0.6%	1.4%
Intl Organizats, Intl Serv	0.8	0.8	0.7	0.4	0.4	0.4
Public Administration	3.2	4.6	1.6	1.7	2.5	0.9
Public Policy Studies	2.2	2.3	2.0	1.2	1.3	1.1
Public Works (Sanit, Utils.)	0.3	0.5	0.1	0.3	0.5	0.1
Social Work: General	5.2	2.7	8.0	3.2	1.7	4.7
Medical Social Work	0.4	0.2	0.6	0.2	0.1	0.3
Social Welfare	1.0	0.5	1.6	0.5	0.3	0.8
Social Work Practicums, Field	0.6	0.1	1.2	0.3	0.1	0.6
Research in Soc Work/Welfare	0.3	<0.1	0.6	0.1	<0.1	0.3
Social Work: Other, Unknown	0.5	0.1	0.9	0.3	0.1	0.5
Public Affairs: Other	0.5	0.4	0.6	0.3	0.3	0.3

45: Social Sciences

Social Sciences: General	3.6	3.3	3.8	3.6	3.5	3.7
Anthropol.: Gen, Intro	16.6	14.6	18.9	10.8	10.1	11.5
Cultural Anthropology	11.3	8.7	14.2	7.5	6.2	8.8
Physical/Biolog/Med Anthro	3.5	3.5	3.5	2.6	2.7	2.4
Non-West Peoples & Cultures	0.5	0.5	0.5	0.3	0.3	0.3
Native Amer (No. & Sth.) Peop	1.0	0.9	1.2	0.7	0.6	0.8
Lang, Linguistics & Culture	0.7	0.4	1.1	0.4	0.3	0.5
Anthro Readings, Research	0.3	0.3	0.4	0.2	0.1	0.2
Anthropology: Other, Unknown	1.5	1.3	1.8	0.9	0.8	1.0
Archaeology	2.4	2.4	2.4	1.3	1.4	1.2
Criminology	8.4	7.8	9.0	5.3	5.4	5.1
Demography	2.5	2.6	2.4	1.4	1.6	1.1

4506: Economics

Economy & Society, Econ Probs	5.2	6.0	4.2	3.5	4.2	2.8
Economics: Princs, Intro	44.1	55.8	30.9	31.4	40.8	21.5
Intermed. Microeconomics	8.9	12.8	4.5	5.0	7.3	2.5
Intermed. Macroeconomics	4.6	6.7	2.1	2.4	3.7	1.1
Economic Statistics	2.3	3.5	1.0	1.2	2.0	0.5
Econometrics, Forcecasting	0.6	0.9	0.3	0.3	0.5	0.1
Public Finance	1.5	2.2	0.8	0.8	1.2	0.4
Intl Trade, Finance, Econ	1.6	2.6	0.6	0.8	1.3	0.3
Monetary Theory, Fiscal Pol	1.0	1.6	0.3	0.5	0.8	0.2
Environ & Nat. Resource Econ	2.2	3.4	0.8	1.1	1.8	0.5
Labor & Human Resource Econ	2.9	4.3	1.3	1.4	2.2	0.6
Money & Banking	8.8	12.8	4.3	5.0	7.3	2.4
History of Economic Thought	0.9	1.6	0.1	0.5	0.9	0.1
Comparative Econ Systems	1.4	2.0	0.6	0.7	1.1	0.3
Econ Devel, 3rd World Econ	0.9	1.3	0.5	0.5	0.7	0.3

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Econ: Oth. Determinable Tops	4.0%	5.5%	2.2%	2.2%	3.2%	1.2%
Econ: Missing, Indeterm	1.5	2.2	0.8	0.8	1.1	0.4

4507: Geography

Geogr: Intro, Combined Tops	19.5	20.1	18.8	12.4	13.3	11.4
Remote Sensing, Anal. Cartog	1.8	2.7	0.8	1.0	1.6	0.4
Cultural Geography	2.7	2.7	2.6	1.7	1.9	1.4
Physical Geography	7.9	8.2	7.6	5.0	5.5	4.4
Economic Geography	1.7	2.4	0.9	1.1	1.7	0.5
Urban Geography	1.2	1.7	0.5	0.6	0.9	0.3
Geog. of N. Amer/Anglo-Amer	3.8	4.5	3.1	2.1	2.6	1.7
Geog. of Europe, USSR	0.6	0.8	0.4	0.3	0.4	0.2
Geog. of Africa, Near East	0.4	0.5	0.2	0.2	0.2	0.2
Geog. of Asia, Pacific	0.3	0.3	0.2	0.2	0.2	0.1
Geog. of Lat. Amer, Carrib	0.5	0.4	0.6	0.3	0.3	0.3
Geography: Other	0.8	0.9	0.6	0.4	0.5	0.3

4508: History

World Hist/Western Civ	29.2	29.8	28.5	21.9	23.6	20.1
Ancient History	6.3	6.6	6.0	4.0	4.4	3.5
Intell/Cult Hist: Gen, Non-US	2.5	2.3	2.8	1.5	1.5	1.5
Economic/Business History	2.7	3.7	1.5	1.5	2.1	0.8
History of Relig/Church His	2.4	2.8	1.9	1.4	1.6	1.2
Historiography, Res Methods	1.8	2.2	1.3	1.0	1.3	0.8
Hist of Sci, Math, Technol	2.4	2.9	1.8	1.3	1.6	1.0
U.S. History Surveys	41.9	42.7	41.0	32.0	34.5	29.4
US Hist: Topics thru Civ War	4.4	5.3	3.3	2.4	2.9	1.8
US Hist: Topics since Civ War	2.6	3.4	1.7	1.4	1.9	0.8
U.S. Cult, Intellect History	2.9	3.0	2.7	1.6	1.7	1.5
US: Indiv. States, Regions	6.1	6.3	5.9	3.8	4.1	3.5
Afro-American History	1.9	1.5	2.5	1.4	1.3	1.5
U.S. Hist: Other	5.4	6.2	4.5	3.1	3.7	2.5
Euro Hist: Dark/Middle Ages	2.7	2.6	2.0	1.5	1.5	1.5
Euro Hist: Renn to 1789	5.2	5.8	4.5	2.8	3.4	2.3
Euro Hist since 1789	6.2	7.9	4.3	3.6	4.7	2.5
Hist of Indiv Countries	5.2	5.7	4.6	2.8	3.1	2.3
Euro Hist: Other, General	4.0	4.1	3.9	2.3	2.5	2.0
Asian History	2.9	3.4	2.4	1.7	2.1	1.3
African History	1.0	1.0	0.9	0.6	0.7	0.6
Latin American History	2.0	1.9	2.0	1.2	1.2	1.2
Hist of Other World Regions	1.6	1.9	1.2	0.9	1.1	0.7
History: Other, Unknown	8.6	10.5	6.4	5.0	6.2	3.7
International Relations	6.2	8.8	3.2	3.5	4.8	2.1

	All	Men	Wom	All	Men	Wom
	<u>BAs</u>	<u>BAs</u>	<u>BAs</u>	<u>>10</u>	<u>>10</u>	<u>>10</u>
				<u>Cred</u>	<u>Cred</u>	<u>Cred</u>

4510: Political Science

Polit. Sci.: Intro, Princs.	12.0%	15.0%	8.6%	8.2%	10.4%	5.8%
U.S. Govt & Politics	35.5	38.6	31.9	26.2	28.9	23.3
U.S. Constit. Law/Pol/Hist	5.6	7.5	3.4	3.3	4.5	2.1
Polit. Theory/Phil/Ideology	5.3	7.1	3.2	2.9	3.9	1.8
Comparative Govt & Politics	3.2	4.2	2.2	1.9	2.3	1.3
European Govt & Politics	2.1	2.9	1.3	1.1	1.5	0.7
Non-West. Govt & Politics	1.8	2.2	1.3	1.0	1.1	0.8
Methodology, Research Design	1.0	1.3	0.8	0.6	0.7	0.5
Pol. Behavior/Elections/Vote	3.3	4.8	1.7	1.9	2.6	1.2
U.S. State, Local Gov & Pol.	6.7	8.6	4.5	4.5	5.6	3.3
U.S. Foreign Pol, Diplomacy	3.1	4.2	1.9	1.7	2.3	1.0
Pol Sci: Oth Determin Topics	1.9	2.4	1.3	1.0	1.3	0.7
Pol Sci: Indeterm, Unknown	3.1	4.0	2.0	1.8	2.3	1.3

4511: Sociology

Sociology: Intro, General	49.5	44.4	55.3	39.2	35.0	43.5
Soc Instits: Marriage, Fam	12.3	8.7	16.5	8.7	6.3	11.2
Soc of Race, Minorities	5.1	4.2	6.0	3.1	2.6	3.5
Organiz. Sociol, Org.Process	2.1	2.0	2.2	1.2	1.2	1.2
Soc of Aging, Health, Death	3.3	1.9	4.8	1.9	1.1	2.7
Social Change,Collect Behav	3.4	2.9	3.8	1.8	1.6	2.1
Social Theory	3.6	3.1	4.2	2.0	1.8	2.2
Comparat. Soc, 3rd World Soc	0.6	0.6	0.7	0.4	0.4	0.4
Soc Problems, Deviance, etc.	15.2	13.8	16.7	10.5	9.6	11.4
Sociol Research Methods	3.9	3.2	4.6	2.1	1.7	2.5
Community/Rural/Urban Sociol	3.9	3.5	4.3	2.3	2.1	2.4
Social Stratif., Inequality	2.1	1.6	2.7	1.3	1.2	1.4
Small Groups, Socialization	1.6	1.1	2.1	1.0	0.7	1.3
Applied Sociol, Internships	0.7	0.8	0.6	0.4	0.4	0.4
Sociology: Missingg,Indeterm	8.1	7.6	8.8	5.2	4.7	5.7
Urban Studies	4.4	4.7	4.0	2.5	2.8	2.2
Social Statistics	1.5	1.3	1.7	0.8	0.8	0.8
Social Sciences: Oth, Indet	3.5	3.3	3.7	2.1	2.1	2.1

46: Construction Trades

Brickmasonry,Stone,Tile	0.1	0.1	---	0.1	0.2	---
Carpentry	0.1	0.1	0.1	0.2	0.4	0.1
Elect/Power Transmiss Instal	0.2	0.3	<0.1	0.2	0.4	<0.1
Electrician	0.2	0.3	---	0.4	0.7	0.1
Building/Property Maintenanc	<0.1	<0.1	---	0.1	0.2	<0.1
Misc. Construction Trades	0.1	0.2	---	0.2	0.3	<0.1
Plumbing,Pipefitting & Steam	<0.1	---	<0.1	0.1	0.1	<0.1
Plumbing	0.1	0.1	---	0.1	0.2	---

	All BAS	Men BAS	Wom BAS	All >10 Cred	Men >10 Cred	Wom >10 Cred
<u>47: Mechanics and Repairers</u>						
Elec/Electron Repair: Gen	0.3%	0.5%	---	0.7%	1.2%	0.1%
Communication Electron Rep	0.2	0.4	---	0.4	0.7	<0.1
Computer Electronics Repair	0.1	0.2	---	0.2	0.3	---
Industrial Electronics	0.2	0.4	0.1	0.3	0.6	<0.1
Heat, AC & Refrig Mechan: Gen	0.1	0.2	<0.1	0.2	0.4	<0.1
Cooling & Refrigeration	0.1	0.1	---	0.3	0.5	<0.1
Heating & AC	0.1	0.2	---	0.2	0.5	---
Heating, AC & Refrig: Other	---	---	---	0.1	0.2	<0.1
Indust Equip Maint. & Rep	0.1	0.1	---	0.2	0.3	<0.1
Electromech/Hydraul/Pneu Rep	<0.1	0.1	---	0.1	0.3	<0.1
Mechans & Reprers: Other	0.2	0.2	0.1	0.1	0.2	0.1
Stationary Energy Sources	0.1	0.2	---	0.1	0.2	---
Vehicle Equip Mechan: Gen	0.1	0.1	<0.1	0.1	0.3	<0.1
Aircraft Mechanics	0.2	0.3	<0.1	0.3	0.5	<0.1
Auto Body Repair	<0.1	<0.1	0.1	0.4	0.7	0.1
Automotive Mechanics	0.6	0.9	0.2	1.4	2.5	0.2
Diesel Engine Mechanics	0.1	0.1	---	0.4	0.7	<0.1
Small Engine Repair	<0.1	0.1	---	0.1	0.2	<0.1
Vehicle etc. Mechanics: Oth	<0.1	<0.1	---	0.2	0.3	<0.1
Mechanics & Repairers: Oth	---	<0.1	0.1	0.1	<0.1	0.1

48: Precision Production

Drafting: Gen, Tech Draft	1.1	1.8	0.3	1.8	2.9	0.6
Architectural Drafting	0.9	1.3	0.4	1.1	1.8	0.3
Civil/Structural Drafting	0.3	0.5	<0.1	0.3	0.6	0.1
Electrical/Electron Drafting	0.2	0.4	---	0.5	1.0	<0.1
Mechanical Drafting	0.5	0.8	0.1	0.7	1.3	0.1
Drafting: Other	0.1	0.1	---	0.2	0.4	<0.1
Graph/Printing Communic: Gen	1.1	1.4	0.7	0.8	1.0	0.5
Commercial Art	0.7	0.4	1.0	0.7	0.7	0.8
Commercial Photography	0.6	0.7	0.5	0.5	0.6	0.3
Typesetting, Composition	0.6	0.4	0.8	0.5	0.4	0.6
Lithography, Platemaking	0.7	0.6	0.8	0.5	0.5	0.5
Photographic Lab & Darkroom	0.1	0.2	---	0.1	0.2	0.1
Printing Press Operations	0.2	0.3	0.1	0.1	0.2	0.1
Silk Screen Making & Print	0.5	0.4	0.6	0.4	0.4	0.1
Graphic/Printing Comm: Other	0.4	0.5	0.4	0.3	0.4	0.4
Leatherworking & Upholstery	0.1	0.1	0.1	0.1	0.1	0.1
Meatcutting	0.1	0.1	---	0.4	0.1	---
Precision Metal Work: Gen	0.2	0.4	<0.1	0.4	0.7	<0.1
Machine Tools/Machine Shop	0.5	0.9	<0.1	1.0	1.9	0.1
Metal Fabrication	0.2	0.3	---	0.2	0.3	<0.1
Sheet Metal	0.1	0.2	---	0.2	0.3	<0.1
Tool & Die Making	0.2	0.3	---	0.2	0.3	---
Welding	0.6	1.0	---	1.7	3.0	0.2

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Precision Metal Work: Other	0.2%	0.2%	<0.1%	0.1%	0.3%	<0.1%
Jewelry Design/Fabric/Repair	0.2	0.1	0.2	0.2	0.1	0.2
Precis Work: Assorted Mater	0.1	0.1	0.1	0.1	0.1	<0.1
Woodworking: General	0.9	1.3	0.5	0.7	1.2	0.3
Furniture Making	0.2	0.3	0.1	0.1	0.2	<0.1
Millwork & Cabinet Making	0.1	0.2	0.1	0.1	0.2	<0.1
Woodworking: Other	0.3	0.5	---	0.2	0.4	---

49: Transportation

Air Transport: General	0.2	0.4	0.1	0.3	0.5	0.1
Airplane Piloting & Navig	0.7	1.2	0.1	0.6	1.0	0.1
Aviation Management	0.2	0.4	0.1	0.2	0.3	0.1
Air Traffic Control	0.1	0.1	<0.1	0.1	0.1	<0.1
Flight Attendants	0.1	0.1	<0.1	0.1	0.1	0.1
Airplane Piloting: Private	0.2	0.4	<0.1	0.2	0.4	0.1
Air Transport: Other	<0.1	<0.1	---	0.1	0.1	<0.1
Vehicle/Equip. Operat.: All	0.1	0.1	---	0.1	0.1	0.1
Deep Water Diving	0.2	0.1	0.2	0.1	0.1	0.1
Sailors & Deckhands	---	---	---	<0.1	<0.1	<0.1
Water Transport: Other	0.1	0.1	---	<0.1	0.1	<0.1
Transportation: Other	0.2	0.3	---	0.1	0.2	<0.1

50: Visual and Performing Arts

Visual & Perf. Arts: Gen	3.4	3.2	3.6	2.4	2.2	2.5
Visual Communications	1.0	0.8	1.2	0.7	0.6	0.8
Crafts: General	1.7	0.7	2.9	1.2	0.5	2.0
Ceramics	4.1	2.1	6.4	3.1	1.6	4.8
Fiber/Textiles/Weaving	1.1	0.3	2.1	0.8	0.2	1.5
Glass	0.3	0.4	0.3	0.2	0.2	0.1
Metal, Jewelry	1.1	0.5	1.7	0.7	0.5	1.0
Crafts: Other	0.6	0.6	0.6	0.3	0.3	0.4
Dance	10.7	4.1	18.1	7.2	2.6	12.1
History of Dance	0.3	---	0.6	0.2	---	0.3
Design: Gen, 2D, 3D	6.2	4.1	8.6	4.9	3.5	6.5
Graphic Design/Arts/Letter	2.3	2.2	2.4	1.8	1.9	1.8
Illustration Design	0.5	0.3	0.7	0.5	0.4	0.6
Industrial Design	0.4	0.5	0.2	0.3	0.4	0.2
Theatre Design, Stagecraft	2.5	1.7	3.4	1.7	1.2	2.2
Design: Other	1.2	1.1	1.4	0.9	0.7	1.1
Dram. Arts, Acting, Direct	8.7	6.8	10.7	6.0	5.0	7.0
His of Theatre, Drama Crit	7.5	6.3	8.8	5.0	4.3	5.7

5006: Film Arts

Film Arts: General	4.9	5.3	4.4	3.0	3.4	2.5
Cinematography/Film-Making	1.6	2.1	1.0	1.1	1.5	0.6

	All BAs	Men BAs	Wom BAs	All >10 Cred	Men >10 Cred	Wom >10 Cred
Photography	5.5%	5.9%	5.0%	4.3%	4.9%	3.6%
Video	0.1	0.1	0.2	0.1	0.1	0.1
Hist of Film, Theory, Crit	3.2	3.8	2.6	1.9	2.2	1.5
Film Arts: Other, Indeterm	0.5	0.6	0.3	0.3	0.3	0.2

5007: Fine Arts

Fine Arts: Gen, Theory, Studio	13.0	10.7	15.6	8.7	7.3	10.1
Art History & Appreciation	22.1	16.9	27.8	15.4	12.8	18.1
Arts Management	0.1	0.2	0.1	0.1	0.1	0.1
Drawing	7.1	5.5	9.0	6.4	5.4	7.5
Intermedia	0.4	0.2	0.7	0.3	0.2	0.3
Painting	3.6	2.1	5.3	2.8	1.8	3.8
Sculpture	2.5	1.6	3.4	1.8	1.4	2.2
Printmaking	1.1	0.5	1.8	0.7	0.4	1.1
Color, Color Theory	0.7	0.4	1.0	0.6	0.3	0.8
Non-West Art: Hist & Apprec	1.1	0.8	1.5	0.7	0.6	0.8
History of Architecture	1.5	1.4	1.6	0.9	1.0	0.8
Fine Arts: Other	3.1	1.8	4.6	2.1	1.6	2.6

5009: Music

Ear Training, Dictation	15.0	13.6	16.6	9.9	9.5	10.3
Music History & Apprec: Gen	16.2	13.8	18.9	10.8	9.9	11.8
Music Performance	15.8	11.6	20.5	11.7	9.1	14.4
Music Theory	5.6	4.8	6.5	3.9	3.6	4.2
Music Literature	3.5	2.8	4.4	2.1	1.7	2.5
Music History: Classical	2.3	1.9	2.6	1.3	1.1	1.4
Music Hist: Opera/Mus Theatre	0.4	0.5	0.4	0.2	0.2	0.2
Music History: Jazz	1.8	2.2	1.3	1.1	1.4	0.9
Music History: Pop/Rock/Folk	0.8	0.9	0.6	0.6	0.7	0.4
Music Hist: Afro-Amer Music	0.4	0.2	0.6	0.2	0.1	0.3
Non-Western Music	0.3	0.4	0.2	0.2	0.2	0.1
Music: Other, Indeterminable	2.8	2.6	3.0	1.6	1.6	1.6
Visual & Perform Arts: Other	0.4	0.2	0.7	0.3	0.1	0.4

90: Other

Cooperative Educ: Fld Unspec	0.7	0.8	0.6	0.8	0.9	0.8
Readgs, Indep Stdy: Fld Unspec	2.3	2.1	2.5	1.2	1.2	1.2
College/Freshman Orientation	4.5	4.5	4.6	5.6	5.6	5.6
Sr Seminars, Theses: Field Unsp	0.8	0.9	0.7	0.4	0.4	0.3
Unclassifiable Titles	7.8	7.3	8.3	5.2	4.9	5.6
Missing	12.3	12.3	12.3	10.2	10.1	10.3

**PERCENTAGE OF NLS/PETS STUDENTS WHO EARNED MORE THAN 10
CREDITS COMPLETING UNDERGRADUATE COURSES
IN AGGREGATE COURSE CATEGORIES, 1972-1984**

This presentation condenses the 1,037 course categories of the revised CIP system to 103, and regroups the categories in general curricular configurations (as opposed to the alphabetical listing of the major fields in the CIP system). There are many potential configurations and course clusters in the NLS/PETS data, and the studies to appear in Archives of a Generation will use, for example, "Non-Western Culture and Society" (in an essay on Cultural Literacy and the College Curriculum), "Sportcredits" (in a study of the careers of varsity athletes), and an aggregate of statistics taught anywhere in the college curriculum (in an exploration of the nature, extent, and effects of mathematics study after high school). Once the cleaned and recoded analysis files are released, researchers will be able to construct their own aggregates from the 1,037 categories.

The universe of students for this table consists of all NLS/PETS participants who earned more than 10 undergraduate credits between 1972 and 1984 (N=10,734). The percentages are weighted for each sub-group. Given the differences in curricular participation by men and women, some of the observed differences among the races may be accounted for by the relative proportion of women in each sub-group.

	<u>All</u>	<u>Men</u>	<u>Women</u>	<u>White</u>	<u>Black</u>	<u>Hisp</u>
(% female)	48.9%	---	---	47.9%	60.8%	46.8%
<u>Occupational/ Professional Fields</u>						
Agribusiness	1.8%	2.9%	0.7%	1.8%	1.3%	0.9%
Agric. Production	3.7	4.7	2.7	4.0	1.3	1.5
Agric. Sciences	4.5	5.5	3.4	4.8	1.5	1.4
Natural Resources	3.3	4.3	2.2	3.4	1.1	2.3
Forestry	1.3	2.1	0.5	1.4	0.4	0.5
Accounting	23.8	28.0	19.4	24.1	19.7	15.0
Business Admin	33.3	40.1	26.2	33.3	30.8	29.1
Gen. Distribution	10.9	14.1	7.4	11.1	9.1	5.6
Architecture	3.0	3.3	2.7	3.1	1.5	2.0
Engin Mech/Phys/Sci	3.9	7.1	0.5	4.0	1.8	2.9
Engineering	7.9	14.0	1.4	8.3	3.5	3.0
Engineering Tech	9.9	17.4	2.0	9.9	6.7	10.4
Science Technols.	0.6	0.8	0.4	0.6	0.5	0.9
Special Education	5.3	1.8	9.0	5.2	7.2	2.5
Education: Subjects ¹	17.8	12.0	23.8	17.4	20.3	16.7
Education: Other	22.1	15.0	29.5	21.7	26.0	15.0

	<u>All</u>	<u>Men</u>	<u>Women</u>	<u>White</u>	<u>Black</u>	<u>Hispan</u>
Library Science	1.9%	1.7%	2.1%	2.0%	0.9%	0.3%
Home Economics ²	16.7	9.3	24.3	16.7	14.8	13.6
Recreation	4.0	5.0	3.0	4.1	3.7	3.0
Allied Health: HPER ³	4.4	4.5	4.4	4.4	4.5	4.4
Allied Health: Other	12.2	8.0	16.7	12.1	12.6	13.8
Speech Path/Audiol.	2.0	0.7	3.3	2.0	2.6	0.2
Clinical Health Sci.	2.3	1.5	3.1	2.3	2.1	0.8
Profess. Health Sci.	3.4	1.8	5.0	3.4	1.9	4.2
Nursing	6.0	1.2	11.1	6.0	7.3	4.1
Other Health Sciences	2.9	2.6	3.2	2.9	2.7	2.7
Journalism	4.2	4.4	4.1	4.3	3.8	2.9
Law	6.9	9.3	4.3	6.9	6.2	5.9
Protective Services	5.5	7.3	3.6	5.3	5.9	7.3
Public Affairs ⁴	7.1	6.6	7.7	6.9	8.6	8.6
Military Science	2.7	4.6	0.6	2.6	3.5	3.1
Theology	10.1	9.5	10.6	10.3	6.8	8.1

Vocational Fields

Fin. Service Support	4.4	2.2	6.8	4.1	7.5	4.1
Computer Support	3.9	4.2	3.6	3.8	4.4	2.9
Secretarial/Clerical	13.7	5.8	21.9	12.7	20.2	20.0
Special. Marketing	2.5	2.6	2.4	2.5	1.7	1.4
Communic. Technologs	2.0	2.4	1.7	2.1	1.3	1.2
Graphic/Print Commun	2.8	2.8	2.7	2.9	1.1	1.9
Personal Services ⁵	0.7	0.5	0.9	0.8	0.1	0.8
Diagnostic/Lab Servs.	3.6	2.3	5.1	3.7	2.1	2.8
Vocational Home Ec	2.9	1.3	4.7	3.0	2.6	0.8
Industrial Arts	2.3	4.0	0.6	2.3	1.8	2.7
Construction	1.1	2.0	0.2	1.1	1.0	1.3
Mechanics/Repair	4.0	7.3	0.6	3.9	4.0	5.3
Precision Production	6.3	10.6	1.8	6.4	4.7	7.1
Transportation	1.4	2.1	0.6	1.5	0.5	1.0

Science & Math

Biol Sci: General	36.3	34.3	38.3	36.0	36.7	28.5
Biol Service Courses	12.3	6.4	18.5	12.4	12.5	7.0
Biol Sci: All Other	27.7	25.1	30.3	28.2	21.2	16.5
Chemistry	29.0	32.5	25.3	29.7	22.0	15.1
Geol/Earth Sci	17.3	19.9	14.5	17.8	9.1	12.1

	<u>All</u>	<u>Men</u>	<u>Women</u>	<u>White</u>	<u>Black</u>	<u>Hispan</u>
Physics	18.0%	25.8%	9.8%	18.5%	9.8%	11.8%
Phys Sci: All Other	20.3	22.8	17.7	20.4	19.3	14.1
Pre-College Math	32.9	32.9	32.8	31.3	43.6	39.1
Intro College Math	30.9	36.9	24.5	30.8	29.6	23.4
Statistics (Math)	13.7	16.4	10.9	13.9	11.0	6.6
Calculus/Adv Math	21.0	29.8	11.8	21.7	10.6	11.3
Math: All Other	7.2	8.3	6.1	7.2	8.1	3.1
Comput Sci: ADP	5.8	6.5	5.0	5.7	6.8	5.8
Comput Sci: Program	8.2	11.9	4.4	8.3	6.1	4.2
Comput Sci: All Oth	10.9	15.5	6.0	11.0	8.5	6.3

Humanities & Soc Sci

Liberal & Interdisc.	24.2	23.2	25.2	24.0	25.1	17.4
American Civilizat.	4.7	4.6	4.8	4.8	3.8	2.4
Area Studies	4.7	4.6	4.7	4.4	5.2	6.5
Ethnic Studies	5.5	4.9	6.1	4.0	16.0	15.5
For. Lang: Elem/Int	26.6	23.0	30.4	26.2	20.2	35.3
For. Lang: Advanced	4.7	3.5	5.9	4.5	2.1	11.8
Literature/Letters	51.8	48.9	54.8	52.0	46.1	39.9
Philosophy	31.1	33.8	28.2	31.6	25.1	18.2
Religious Studies	10.7	10.6	10.9	11.0	7.3	5.3
Art History	16.1	13.7	18.6	16.2	14.3	13.1
World/West Civil.	21.9	23.6	20.1	21.7	25.2	10.6
U.S. History Surveys	32.0	34.5	29.4	31.9	28.9	34.4
History: All Other	26.0	28.2	23.7	26.1	24.3	17.3
U.S. Government	26.2	28.9	23.2	25.9	25.1	30.7
Pol. Sci.: All Oth	19.7	24.2	14.8	19.8	16.8	16.4
Writing Skills: All	75.2	75.3	75.0	73.4	82.0	78.2
Communicat: Intro	29.4	29.8	28.9	29.0	31.0	27.8
Communicat: All Oth	25.5	27.2	23.7	25.5	25.0	18.7
Psych: General	56.5	52.1	60.9	56.5	50.1	48.4
Developmental Psych	16.8	10.2	23.7	16.8	16.8	8.8
Psych: All Other	27.1	23.6	30.6	27.2	22.3	21.6
Anthropology	19.4	17.9	21.0	19.7	13.7	16.5
Sociology: Intro.	39.2	35.0	43.5	39.0	39.5	31.0
Sociol.: All Other	25.1	21.8	28.5	24.1	31.8	24.5
Economics: Intro	31.4	40.8	21.5	31.6	26.5	22.8
Economics: All Oth	14.7	20.2	8.9	14.9	11.8	8.2
Geography	19.5	21.0	17.9	19.9	13.5	13.5
Misc Social Sci.	13.5	14.0	12.9	12.6	20.6	15.3

	<u>All</u>	<u>Men</u>	<u>Women</u>	<u>White</u>	<u>Black</u>	<u>Hispan</u>
<u>Fine/Perform Arts</u>						
Crafts	5.2%	2.7%	7.8%	5.3%	2.5%	5.7%
Design	8.2	6.6	9.9	8.5	4.7	6.4
Visual Arts: All Oth	18.1	15.8	20.4	18.0	14.5	18.9
Theatre & Film	16.7	16.8	16.6	17.3	10.2	12.2
Music Performance	11.7	9.1	14.4	11.7	9.3	12.2
Music: All Other	23.7	22.3	25.1	23.6	22.8	15.8
Other Arts	7.5	2.7	12.5	7.3	8.8	8.1
<u>Personal Service</u>						
Homemaking Education	9.4	3.4	15.7	9.5	8.0	7.8
Basic Skills ⁶	5.5	4.8	6.2	4.9	9.8	6.8
Phys & Health Activs	61.2	61.1	61.2	60.5	60.1	60.3
Personal Develop.	13.6	10.9	16.4	13.0	17.4	15.9
<u>Other</u>						
Orientat., Co-Op, etc.	7.8	7.9	7.7	6.8	13.8	16.1
Unclassifiable	5.2	4.9	5.6	5.2	4.6	5.9
Missing	10.2	10.1	10.3	10.0	10.4	10.1

NOTES:

1. E.g. Arts Education, Physical Education, Reading & Language Arts, Mathematics Education.
2. "Academic" Home Economics, e.g. nutrition/dietetics, textiles, family development.
3. HPER=Health/Physical Education/Recreation, sometimes known as "Movement Science," and distinguished from Physical Education for Teacher Certification.
4. I confess to an error in programming that would have been too expensive (\$450 for this table) to correct: I meant to disaggregate Social Work from Public Affairs. Social Work turns out to account for nearly 45% of all credits earned in the general "Public Affairs" category.
5. Principally Cosmetology.
6. Does not include remedial/developmental language or mathematics courses. The former are included under "Writing Skills," the latter under "Pre-Collegiate Math."

DISTRIBUTION OF COMPLETED COURSES: By Type of Institution

In the following pages, and for each of the 1,037 course categories in this taxonomy, we present the distribution of all courses completed by NLS/PETS students between 1972 and 1984, by institutional type. By "all courses" is meant both undergraduate and graduate/professional. Transfer courses are not included, i.e. they are counted only at their first taking. By "completed" is meant a course with any grade received except Withdrawal or Incomplete. Grades of "F" are included. Some 12,332 of the 12,599 NLS/PETS students presented records with at least one completed, credit-bearing course by this definition.

There are six institutional types for purposes of this presentation. They were defined with reference to Carnegie Classification codes, and cover the following:

- Doctoral: Research Universities, Class I and Class II
 Doctoral Degree-Granting, Class I

- Comprehensive: Doctoral Degree-Granting, Class II
 Comprehensive College, Class I
 Comprehensive College, Class II

- Liberal Arts: Liberal Arts College, Class I and Class II

- Community College: Community Colleges
 Two-Year Technical Colleges

- Trade: Proprietary Vocational Schools
 Vocational-Technical Institutes
 Proprietary Schools of Business, Design, etc.
 Corporate Colleges

- Specialized: Religious Institutions/Theological Seminaries
 Medical Schools
 Hospital Schools of Nursing/Health Technology
 Other Professional Health Colleges
 Colleges of Art/Music
 Engineering Schools
 Law Schools
 Military Service Academies

The NLS/PETS students attended roughly 3,900 institutions, each of which was assigned a Carnegie Code based on its 1975 status as indicated in the Higher Education General Information System (HEGIS). Where the HEGIS designation was in conflict with degrees actually awarded by an institution on the transcripts of NLS/PETS students, institutional status was resolved in favor of the latter. For example, a branch campus of a state university might have been listed in HEGIS as a 2-year public college, but

if we found that it was awarding Bachelor's degrees, we classified it as a Comprehensive College.

Of particular note in this classification are specialized institutions. In the HEGIS system, the U.S. Service academies (e.g. West Point), major institutes of technology (e.g. Stevens), and colleges of art/design (e.g. Rhode Island School of Design) are classified under special Carnegie codes. For this presentation, we maintained their original designation. But for other analyses, our rule was that if any of these schools awarded Bachelor's degrees in subjects other than their nominal specialty, they were not specialized institutions, and were reclassified accordingly.

The table below indicates both the **TOTAL** number of instances of completed courses and the **percentage** of those courses completed in each type of institution. One must judge the percentage distribution in each case against the percentage distribution for all completed courses indicated in the first line of the table. Under "Agricultural Business and Management: General" (the first course entry), for example, community colleges provided knowledge to the NLS/PETS cohort in a much higher proportion than they did for all courses, and liberal arts colleges in a lower proportion.

INSTITUTIONAL TYPE

COURSE	Doct	Comp	LibA	CommC	Trade	Spec	CASES
ALL COURSES	29.4%	36.0%	6.1%	22.0%	2.3%	4.3%	430,885

AGRICULTURAL BUSINESS/PRODUCTION

Agric Bus & Mgt: General	24.5	35.1	1.3	31.8	2.0	5.3	151
Agric Business	43.6	16.0	0.0	35.1	5.3	0.0	94
Agric Economics	60.7	24.5	0.3	13.5	1.0	0.0	290
Farm & Ranch Management	27.6	41.4	0.0	25.9	2.6	2.6	116
Ag Bus, Management & Market: Other	20.5	18.0	0.0	61.5	0.0	0.0	39
Agric Mechanics: General	29.3	53.5	0.0	15.5	1.7	0.0	58

	Doct	Comp	LibA	CommC	Trade	SpecI	<u>N</u>
Agric Electrific. Farm Elect.Syst	60.5	21.1	0.0	15.8	2.6	0.0	38
Agric Mechanics, Farm Shop	40.5	38.1	0.0	21.4	0.0	0.0	42
Agric Power Mach, Field Equipment	26.2	11.9	0.0	58.3	2.4	1.2	84
Ag Struct, Equip, Facilities	54.2	27.1	0.0	16.7	2.1	0.0	48
Ag Soil/Water Practices	57.3	24.7	0.0	11.2	3.4	3.4	89
Agric Production: General	35.9	29.7	0.0	31.4	0.0	3.1	64
Animal Production Feed Lot, Pasture	52.4	20.1	0.5	22.2	2.1	2.7	189
Crop Production	38.1	35.1	0.0	23.8	2.4	0.6	168
Agric. Production: Other	44.1	35.3	0.0	17.7	0.0	2.9	34
Agric Products/ Processes	53.2	21.3	0.0	21.3	0.0	4.3	47
Agric Supplies/ Services	35.3	17.7	0.0	47.1	0.0	0.0	17
Horse Handling & Care, Training	61.0	9.8	0.0	29.3	0.0	0.0	41
Horticulture: Gen Organic Garden	53.3	26.3	1.5	19.0	0.0	0.0	137
Arboriculture	39.1	17.4	4.4	39.1	0.0	0.0	23
Ornamental Horti- culture	45.1	29.7	1.1	24.2	0.0	0.0	91
Greenhouse Opera- tions	37.5	33.3	0.0	29.2	0.0	0.0	24
Landscaping	41.8	22.5	0.0	34.7	1.0	0.0	98

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Nursery Operations	21.7	34.8	0.0	43.5	0.0	0.0	23
Turf Management	42.9	14.3	0.0	42.9	0.0	0.0	28
Agribus/Ag Product:Other	29.4	27.5	0.0	43.1	0.0	0.0	102

AGRICULTURAL SCIENCES

Agric. Sciences: General	56.4	32.5	1.6	9.5	0.0	0.0	126
Animal Sciences: General	53.5	31.5	0.6	13.7	0.3	0.6	359
Anim Breed, Reproduction	62.2	26.8	0.8	5.5	0.8	3.9	127
Animal Health: Farm/Range	57.5	14.9	0.0	21.3	4.3	2.1	47
Animal Nutrition, Feeds, Feeding	58.1	25.0	1.7	12.8	1.2	1.2	172
Dairy	49.3	35.2	0.0	11.3	4.2	0.0	71
Livestock	48.3	28.1	0.0	19.1	2.8	1.7	178
Poultry	55.8	34.6	0.0	9.6	0.0	0.0	52
Animal Sciences: Other	75.0	19.4	0.0	5.6	0.0	0.0	72
Food Sciences, Systems	58.0	25.3	0.0	15.3	1.3	0.0	150
Plant Sciences: General	47.3	33.7	0.6	17.8	0.0	0.6	169
Agronomy	57.8	28.4	0.0	13.7	0.0	0.0	102

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Horticultural Sci Plant Propagat.	60.3	19.0	0.0	17.2	0.0	3.5	58
Plant Protect/ Pest Control	32.6	30.2	0.0	32.6	4.7	0.0	43
Range Management	71.2	25.4	0.0	3.4	0.0	0.0	59
Plant Sci: Other	47.5	40.7	1.7	10.2	0.0	0.0	59
Soil Sciences & Soil Conservat.	45.2	34.2	1.1	15.3	2.3	2.0	354
Agric Sciences: Other	48.8	31.7	0.0	19.5	0.0	0.0	41

RENEWABLE NATURAL RESOURCES

Renew Nat.Resour- ces: General	50.0	41.1	0.0	8.9	0.0	0.0	56
Land/Water Use, Mgt, Resources	42.4	39.4	3.0	9.1	0.0	6.1	33
Conservation: Gen	33.9	48.3	3.9	13.9	0.0	0.0	230
Resource Mgt & Regulation	48.4	38.7	0.0	3.2	0.0	9.7	31
Fishing & Fisher- ies	60.6	24.2	0.0	9.1	0.0	6.1	33
Forestry Product: Gen, For.Utiliz.	32.6	19.6	0.0	37.0	2.2	8.7	46
Logging, Forest Harvesting	5.3	10.5	0.0	63.2	5.3	15.8	19
Forestry & Rel. Sci: General	50.4	18.9	1.6	23.6	0.8	4.7	127
Forestry Sci., Dendrology	46.9	16.4	3.1	24.2	0.0	9.4	128

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Forest Management Silviculture	41.0	22.5	2.3	14.6	1.1	18.5	178
Wood Sci, Forest Mensuration	47.5	30.0	0.0	7.5	5.0	10.0	40
Forestry & Rel Sci.: Other	38.4	20.8	3.2	28.8	2.4	6.4	125
Wildlife Mgmt & Conservation	66.0	21.8	0.7	6.1	0.0	5.4	147
Renewable Nat. Res.: Other	68.7	14.5	0.0	4.8	0.0	12.1	83

ARCHITECTURE & ENVIRONMENTAL DESIGN

Archit & Envir: General	44.8	37.9	0.0	10.3	3.5	3.5	29
Architecture	81.2	10.9	0.4	3.0	1.3	3.2	469
City, Comm & Reg Planning	64.8	24.7	1.7	3.9	0.0	5.0	182
Environmental Design	71.9	20.3	3.1	4.7	0.0	0.0	128
Interior Design	43.6	22.1	3.1	18.4	8.6	4.3	163
Landscape Archit	80.5	4.5	0.8	9.8	0.8	3.8	133
Urban Design	85.0	10.0	0.0	2.5	0.0	2.5	40
Archit & Envir. Design: Other	83.7	9.3	0.0	3.5	0.0	3.5	86

AREA STUDIES

African Studies	28.2	58.5	8.2	4.4	0.0	0.7	135
American Studies	34.7	36.3	2.9	24.8	0.3	1.0	874

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Asian Studies	45.9	40.0	5.9	8.2	0.0	0.0	85
East Asian Studies	47.4	41.1	5.3	4.2	0.0	2.1	95
East European Studies	66.7	16.7	16.7	0.0	0.0	0.0	6
European Studies	46.3	37.2	5.0	11.6	0.0	0.0	121
Latin American Studies	45.3	34.3	7.7	11.6	0.0	1.1	181
Middle Eastern Studies	30.5	55.9	6.8	3.4	0.0	3.4	59
Pacific Area Studies	64.3	14.3	14.3	7.1	0.0	0.0	14
Russian and Slav. Studies	55.0	26.4	8.8	8.8	0.0	1.1	91
Scandinavian Studies	93.3	6.7	0.0	0.0	0.0	0.0	15
South Asian Studies	27.8	66.7	5.6	0.0	0.0	0.0	18
Southeast Asian Studies	6.7	60.0	20.0	13.3	0.0	0.0	15
Western European Studies	39.1	52.2	0.0	8.7	0.0	0.0	23
Canadian Studies	50.0	50.0	0.0	0.0	0.0	0.0	16
Area Studies: Other	15.8	21.1	52.6	10.5	0.0	0.0	19

ETHNIC STUDIES

Afro-American/Black Studies	37.9	42.1	7.6	11.0	0.3	1.0	589
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	Doct	Comp	LibA	CommC	Trade	Spec1	N
Native American Studies	34.7	46.9	4.2	13.8	0.4	0.0	239
Hispanic American Studies	22.5	47.6	1.5	26.9	0.0	1.5	271
Islamic Studies	76.9	7.7	15.4	0.0	0.0	0.0	13
Jewish Studies	54.8	31.2	8.6	2.2	0.0	3.2	93
Asian-American Studies	45.5	54.6	0.0	0.0	0.0	0.0	22
Ethnic Studies: Other	11.1	46.3	3.7	37.0	0.0	1.9	54

BUSINESS & MANAGEMENT

Gen. Business Principles	10.4	31.9	3.1	49.2	3.3	2.1	1552
Business Law, Legal Envir.	22.8	37.9	3.7	30.0	3.2	2.5	2667
Business and Gov	32.8	52.5	8.6	5.1	0.0	1.0	198
Intro. Accounting	20.1	32.2	4.0	37.7	3.8	2.1	5306
Tax Accounting	35.1	36.9	3.1	13.3	4.6	7.0	952
Account.:Advanced	35.8	42.5	3.7	11.8	3.0	3.3	3840
Finance: Princ., Corporate	42.5	44.4	3.4	5.9	0.9	3.0	1621
Bank/Finan. Inst Operations, Mgmnt	37.6	20.8	2.5	33.7	1.5	4.0	202
Securities and Investments	41.3	40.2	5.4	7.6	0.8	4.6	368

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Management: Gen, Theory	31.8	39.1	3.5	19.0	2.2	4.5	2455
Operations & Production Mgmnt.	43.4	43.2	1.3	9.6	0.5	2.0	606
Business Economics	46.8	39.8	1.2	4.7	0.6	7.0	171
Personnel Mgt./ Human Res. Devel.	27.2	40.0	2.9	24.0	2.3	3.6	920
Institutional Management	37.2	28.7	1.1	25.5	4.3	3.2	94
Transportation Management	50.9	21.4	0.0	17.0	5.4	5.4	112
Insurance & Risk Management	44.5	35.7	2.5	13.2	1.7	2.5	364
International Management	53.2	36.3	1.6	0.8	0.0	8.1	124
Labor/Industrial Relations	40.3	40.7	3.1	11.6	1.7	2.6	459
Management Information Systems	42.0	44.4	0.4	7.0	0.4	5.8	257
Business Statistics	45.9	42.7	1.1	8.9	0.5	0.9	801
Operat. Research, Decision Sci.	49.7	44.5	1.0	0.9	0.2	3.7	670
Management Sci./ Quant. Methods	39.1	45.5	4.0	5.0	0.0	6.4	202
Marketing Manag., Theory, Strategy	42.4	40.0	2.2	12.0	1.2	2.2	1138
Marketing Research	44.4	45.9	0.9	4.1	0.6	4.1	320
Organizational Behev., Devel.	44.7	42.1	2.1	7.7	1.0	2.5	1104
Real Estate	32.7	27.2	2.2	31.2	1.7	5.0	727

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Small Business Management	17.5	29.1	1.9	44.2	2.4	4.9	206
Internships in Business	21.4	35.9	6.0	31.6	4.3	0.9	117
Personal Finance	24.8	40.4	7.0	23.0	1.3	3.5	230
Bus. Admin: Indeterminate, Oth	34.5	32.7	0.1	16.9	5.9	3.9	539

OFFICE SUPPORT OCCUPATIONS

Account & Book-keeping	7.2	14.4	0.0	59.7	17.3	1.4	139
Comput. Account., Clerical Account	5.8	3.9	5.8	50.0	30.8	3.9	52
Bookkeeping	0.0	4.0	0.0	77.0	19.0	0.0	100
Machine Billing/Office Machine	3.7	21.0	1.2	52.1	19.4	2.6	428
Account & Bookkp. Suppt: Other	13.2	13.2	0.0	47.4	26.3	0.0	38
Banking & Related Fin Prog. Supp't	8.2	21.3	0.0	60.7	9.8	0.0	61
Banking Occupations: Other	3.0	42.4	0.0	39.4	12.1	3.0	33
Business Data Processing	28.4	33.0	1.1	28.4	6.7	2.4	373
Business Computer Operations	14.1	19.2	0.0	53.5	13.1	0.0	99
Bus Data Entry Equip Operations	0.7	7.3	1.5	62.0	25.6	2.9	137
Business Data Programming	21.1	43.4	0.0	29.0	6.6	0.0	76

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Office Supervis.	8.3	30.5	2.2	47.1	9.5	2.5	325
Personnel & Train- ing Programs	11.8	17.7	11.8	47.1	11.8	0.0	17
Secretarial Progs General	2.6	17.7	2.1	59.6	16.0	2.1	1491
Court Reporting	2.7	37.0	0.0	17.8	32.9	9.6	73
Executive Secre- tarial	9.5	0.0	0.0	52.4	28.6	9.5	42
Legal Secretarial	3.6	23.8	1.2	46.4	20.2	4.8	84
Medical Secretary	2.5	5.7	0.4	49.4	41.6	0.4	245
Secretarial	4.2	15.2	0.0	63.6	16.4	0.6	165
Stenography	4.2	17.0	2.3	57.8	17.1	1.7	1690
Secretar. Progs. Other	3.0	11.9	3.0	53.7	26.9	1.5	67
General Office Programs	4.8	19.9	1.5	47.3	21.9	4.6	607
Typing, Clerk- Typist	0.6	9.2	2.4	67.8	18.7	1.3	1074
Busin. Corres- pondence	19.1	16.0	0.8	45.0	17.6	1.5	131
Duplicat. Machi e Operations	0.0	23.1	0.0	56.4	20.5	0.0	39
General Office Clerk	3.0	8.4	1.7	59.9	26.6	0.3	297
Receptionist	13.0	13.0	0.0	21.7	52.2	0.0	23
Gen. Office Occu- pations: Other	1.6	22.1	1.6	54.9	14.8	4.9	122

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Word Processing	4.4	10.9	2.2	65.2	15.2	2.2	46
Bus. Communicat., Bus. English	10.8	35.1	1.7	38.2	12.8	1.4	851
Bus. Support: Oth	11.1	25.9	0.0	40.7	22.2	0.0	27

SPECIALIZED MARKETING

Fashion, Apparel	17.7	7.3	0 0	53.2	8.9	12.9	124
Fashion Modeling	0.0	0.0	3.6	17.9	78.6	0.0	28
Display	6.5	32.3	0.0	51.6	9.7	0.0	31
Food Marketing	4.8	23.8	0.0	66.7	4.8	0.0	21
Industrial Sales	22.5	47.5	5.0	17.5	2.5	5.0	40
International Marketing	40.0	43.1	3.5	3.5	1.7	8.6	58
Purchasing	7.3	37.7	0.0	46.4	7.3	1.5	69
Retailing	19.6	30.2	1.0	43.5	3.5	2.3	398
Sales	16.5	30.9	2.8	39.4	6.3	4.2	431
Marketing/Distri- bution: General	28.5	43.0	3.2	19.0	1.5	4.9	1071
Gen. Marketing: Other	29.6	43.2	0.0	12.5	5.7	9.1	88
Hospitality & Re- creational Mktg	42.5	22.5	0.0	27.5	7.5	0.0	40

	Doct	Comp	LibA	Commc	Trade	SpecI	N
Insurance Market- ing	39.3	41.0	1.6	11.5	3.3	3.3	61
Transport. & Tra- vel	17.4	19.6	4.4	19.6	28.3	10.9	46
Tourism	11.5	38.5	0.0	46.2	3.9	0.0	26
Travel Services	3.5	3.5	0.0	41.4	51.7	0.0	29
Auto Vehicles/ Accessories Mktg	0.0	6.7	0.0	20.0	13.3	60.0	30
Spec. Marketing/ Distrib.: Other	41.3	43.5	0.0	8.7	4.4	2.2	46

COMMUNICATIONS

Communications: General	18.2	36.4	5.3	34.9	2.4	2.6	4185
Advertising	38.0	31.6	2.0	18.7	5.4	4.3	765
Communications Research/Theory	46.1	38.2	1.2	11.5	2.4	0.6	165
Journalism, Report -ing, Editing, etc	41.8	38.5	3.4	14.0	1.1	1.3	1027
Public Relations	40.4	42.5	1.8	10.9	2.8	1.8	285
Radio/TV News Broadcast, Direct	36.2	47.2	4.1	9.0	1.4	2.1	290
Radio/TV: Gen., Writing for	38.0	42.3	4.8	12.4	1.2	1.2	581
Mass Communica- tions/Media	43.0	42.6	2.6	9.1	1.1	1.6	618
Public Opinion & Propaganda	37.3	53.7	7.5	1.5	0.0	0.0	67

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Communic. Law, Ethics, Regulat.	53.9	42.3	1.0	2.9	0.0	0.0	104
Interpersonal Communication	31.1	40.6	4.4	22.4	0.2	1.3	827
Interviewing	23.1	38.5	2.6	35.9	0.0	0.0	39
Internships in Communcations	43.1	27.5	4.6	24.8	0.0	0.0	109
Communication: Indeterm, Other	35.0	32.0	3.3	24.4	2.6	2.6	303

COMMUNICATIONS TECHNOLOGIES

Educational Media Technol,A/V Prod	19.1	58.3	5.2	11.3	3.5	2.6	115
Motion Picture Technology	45.8	4.2	8.3	0.0	0.0	41.7	24
Photographic Tech Camera Theory	17.5	50.0	7.5	22.5	2.5	0.0	40
Radio/TV Produc. & Broadcast Techn	32.1	41.2	3.0	16.4	7.3	0.0	165
Sound Recording Technology	26.8	34.2	0.0	17.1	22.0	0.0	41
Communic. Techn: Other	12 5	50.0	4.2	33.3	0.0	0.0	24

COMPUTER SCIENCE

Intro. Computer Science	31.9	37.6	5.4	16.9	1.1	7.3	854
Comput. Literacy	32.6	38.6	4.3	21.0	0.4	3.0	233
Comput Program.	24.5	32.1	3.0	32.9	3.4	4.2	1504

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Algorithms, Algorithmic Devel.	48.6	28.6	4.3	12.9	1.4	4.3	70
Machine/Assembly Language	24.8	23.3	1.5	36.8	11.3	2.3	133
Compiler Language	39.2	27.9	2.5	29.1	0.0	1.3	79
Data Processing: Gen., RPG	11.4	22.3	2.2	56.2	6.0	2.0	967
Data/Info/File Structures	43.6	45.5	0.0	7.3	0.0	3.6	55
Info Systems, Data Base Mgmt	46.5	38.7	1.9	9.7	0.0	3.2	155
Systems Analysis, Devel.	24.9	37.6	1.8	26.6	5.7	3.5	229
OS, JCL, System Software & Prog.	33.7	22.8	1.1	32.6	7.6	2.2	92
Comput. Applicat: General	22.9	47.1	2.9	20.0	4.3	2.9	70
Comput. Applicat: Sci & Engineer.	40.2	23.2	2.4	12.2	2.4	19.5	82
Comput. Applicat: Business; COBOL	52.0	32.4	2.0	7.8	3.9	2.0	102
Comput. Applicat: Other Fields	43.6	41.0	2.6	12.8	0.0	0.0	39
Automata, AI, Graphics, Oth Adv	65.3	26.5	2.0	6.1	0.0	0.0	49
Numerical Analysis/Methods	60.2	30.1	6.0	2.3	0.0	1.5	133
Oth Comput Sci. Topics	32.9	32.9	5.1	24.1	2.5	2.5	79
Comp.Sci: Indeterm./Unknown	48.5	25.8	3.0	18.2	4.6	0.0	66

Doct	Comp	LibA	CommC	Trade	Spec1	N
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CONSUMER & PERSONAL SERVICES

Funeral Services	23.8	4.8	0.0	54.0	17.5	0.0	63
Cosmetology, Bar- bering, Hair Sty	1.6	0.4	0.4	42.3	54.9	0.4	253
Consumer/Pers. Services: Other	10.8	27.0	2.7	56.8	2.7	0.0	37

EDUCATION

Education: Generl	23.1	50.5	9.3	15.2	0.4	1.5	685
Bilingual/Cross- cultural Educat	33.7	63.9	1.2	1.2	0.0	0.0	83
Curric. & Curric Theory	26.8	56.7	10.3	3.8	0.0	2.4	291
Instruction, Meth & Materials	28.5	51.5	10.7	5.9	0.1	3.3	829
School Admini- stration	30.6	59.0	4.5	1.0	0.0	4.9	286
Educational Su- pervision	9.3	80.0	0.0	10.7	0.0	0.0	75
Higher Ed Admin & Research	43.2	54.1	0.0	2.7	0.0	0.0	37
Instruct./Educat. Media	22.4	66.2	7.5	1.6	0.7	1.6	438
Evaluation and Research	24.9	71.5	2.2	1.1	0.4	0.0	277
Educational Stat- istics	48.5	42.7	1.5	2.9	0.0	4.4	68
Educat. Testing, Measurement	23.1	67.7	8.2	0.4	0.0	0.6	489

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Educ. Research: Other	34.4	53.1	4.7	7.8	0.0	0.0	64
Educational Psych	28.3	55.7	9.0	5.3	0.2	1.5	1795
School Psychology	40.0	54.3	0.0	1.4	0.0	4.3	70
Soc., Hist., Phil. Foundations	22.8	60.5	11.6	3.9	0.3	0.9	958
Special Educat.: General	28.3	60.5	5.6	4.2	0.3	1.1	788
Spec. Ed.: Cult. Disadvantaged	25.9	63.0	0.0	7.4	0.0	3.7	27
Spec. Ed: Deaf/ Hearing Impaired	57.4	26.9	12.0	3.7	0.0	0.0	108
Spec. Ed.: Gifted & Talented	42.6	49.6	1.7	5.7	0.4	0.0	230
Spec. Ed.: Emo- tionally Handic	28.7	63.0	0.0	2.8	2.8	2.8	108
Spec. Ed.: Mental Handicapped	29.2	64.4	4.8	1.6	0.0	0.0	315
Spec. Ed.: Multi- ple Handicapped	40.4	46.8	10.6	2.1	0.0	0.0	47
Spec. Ed.: Physi- cally Handicap.	46.4	46.4	0.0	7.1	0.0	0.0	28
Spec. Ed.: Reme- dial Educ.	27.4	53.2	12.9	3.2	0.0	3.2	62
Spec. Ed.: Learn. Disabilities	28.7	59.1	5.9	1.8	0.7	3.9	286
Spec. Ed.: Speech Correction	34.9	57.6	4.7	0.6	0.0	2.3	172
Spec. Ed.: Other	35.4	60.3	1.9	1.9	0.0	0.5	418
Stud. Counseling, Guidance	37.1	50.6	4.3	6.6	0.6	0.9	350

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Higher Ed. Stud. Personnel Servs.	55.9	35.3	2.9	0.0	0.0	5.9	34
TE: Adult and Continuing Ed.	56.4	33.3	0.0	7.7	0.0	2.6	39
TE: Elementary Ed	26.9	62.0	8.6	2.3	0.0	0.3	1333
TE: Junior High/ Middle School	28.6	57.1	10.7	0.0	3.6	0.0	28
TE: Early Child- hood Education	27.5	47.4	6.0	18.8	0.0	0.4	739
TE: Secondary Ed	28.8	61.4	9.2	0.3	0.0	0.2	920
TE Gen. Programs: Other, Indeterm.	50.5	38.4	5.1	3.0	1.0	2.0	99
TE: Agricultural & Ag.Extens. Ed.	62.1	35.6	0.0	2.3	0.0	0.0	87
TE: Art Education	27.6	54.8	8.9	7.0	0.0	1.7	699
TE: Business/Mark & Distrib. Ed.	19.3	74.6	4.4	1.8	0.0	0.0	114
TE: Driver and Safety Ed.	18.1	75.6	3.1	1.9	1.3	0.0	160
TE: English Educ.	33.0	56.2	7.5	1.7	0.0	1.7	349
TE: Foreign Lang. Education	39.7	50.0	3.5	6.9	0.0	0.0	58
TE: Health/Nutr. Ed, School Health	24.5	62.4	7.7	5.3	0.0	0.2	625
TE: Home Econom- ics Education	42.9	41.3	4.8	7.9	0.0	3.2	63
TE: Industrial Arts Education	46.5	52.7	0.0	0.0	0.0	0.8	129
TE: Mathematics Education	25.1	59.6	8.1	6.6	0.1	0.5	938

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
TE: Music Educa- tion/Pedagogy	30.1	53.0	9.7	4.3	1.1	1.9	858
TE: School Phys. Ed, Coaching, etc.	24.7	60.3	10.8	3.7	0.1	0.4	1663
TE: Reading Educ.	25.6	64.1	7.3	1.7	0.0	1.4	1076
TE: Science Educ.	29.0	60.7	6.3	3.2	0.0	0.8	496
TE: Social Studs. Ed.	29.1	59.9	8.2	1.9	0.7	0.2	429
TE: Vocational Ed Technical Educ.	33.9	60.3	1.7	4.1	0.0	0.0	121
TE: Drama and Dance Educ.	34.8	52.8	4.5	6.7	1.1	0.0	89
TE: Lang. Arts, Children's Lit.	23.5	55.7	10.5	9.1	0.2	1.0	921
TE: Other, Inde- terminable	22.8	59.5	8.9	7.6	0.0	1.3	79
TESOL	51.7	41.7	5.0	1.7	0.0	0.0	60
Student Teaching, Pract ums, etc.	30.1	52.7	10.2	5.3	0.4	1.4	1321
Educ.: Indeterm., Missing	27.6	56.9	6.3	6.9	0.1	2.3	784

ENGINEERING

Engineering: Intr Design, Concepts	50.4	23.7	0.6	6.6	1.4	17.4	351
Aerospace, Aero- nautical Engin.	57.3	8.7	0.0	0.0	0.5	33.5	185
Agricultural Eng	73.0	23.8	0.0	3.2	0.0	0.0	63
Architectural Eng Arch. Structures	79.7	12.8	0.0	3.8	0.0	3.8	133

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Bio/Biomedical Engineering	81.4	11.6	0.0	2.3	0.0	4.7	43
Chemical Engin.	81.9	8.4	0.3	0.0	0.0	9.3	332
Civil, Transport Engineering	64.5	22.0	1.1	3.0	0.0	9.4	705
Computer Engin., Comput Archit.	57.5	30.0	1.4	3.6	1.8	5.7	280
Elect, Electron, Communic. Engin	53.8	24.6	2.2	6.1	2.0	11.2	1388
Engin. Mechanics/Statics/Dynamics	51.2	26.0	1.0	8.9	0.5	12.4	920
Engin. Physics, Tech/Appl Physic	34.7	15.0	3.3	42.3	1.5	3.3	274
Engineering Science	53.2	27.7	0.0	10.6	0.0	8.5	47
Envir./Envir. Health Engin.	64.4	27.1	0.0	1.7	0.0	6.8	59
Geolog. & Geophysical Engin.	37.5	58.3	0.0	0.0	0.0	4.2	24
Industrial Engin, Production Desg	53.5	39.9	0.0	4.6	1.0	1.0	198
Engin. Economics, Mgmt.	57.7	32.1	0.0	5.8	0.0	4.4	137
Materials Engin/Science	54.9	26.0	0.8	10.2	0.0	8.1	246
Mech. Engin., Eng Thermo/Convers.	60.9	26.8	0.3	2.5	0.4	9.1	749
Metallurgical Eng	29.3	9.8	0.0	0.0	17.1	43.9	41
Mining & Mineral Engineering	17.1	14.6	0.0	12.2	0.0	56.1	41
Naval Arch. & Marine Engineering	1.6	0.0	0.0	0.0	0.0	98.4	63

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Nuclear Engineer	80.6	4.5	0.0	0.0	0.0	14.9	67
Ocean/Coastal Engineering	12.5	2.5	0.0	0.0	0.0	85.0	40
Petroleum Engin/ Production	19.4	24.2	3.2	3.2	0.0	50.0	62
Surveying/Mapping Geodetic, Site	36.6	41.8	0.7	9.2	3.9	7.8	153
Systems Engineer	50.0	24.3	2.9	4.3	0.0	18.6	70
Engin. Graphics/ Drawing	33.3	25.6	1.1	31.1	0.8	8.2	379
Engin. Math/Stats	74.8	23.3	0.0	1.9	0.0	0.0	103
Engineering: Oth, Indeterminable	51.8	35.0	1.1	6.6	0.4	5.1	274

ENGINEERING TECHNOLOGIES

Archit. Design Tech/Communicat	32.0	11.7	0.3	45.8	4.8	5.4	334
Archit. Interior Design Technol	56.8	5.4	0.0	35.1	2.7	0.0	37
Civil Technology	13.6	20.6	0.0	53.3	6.0	6.5	199
Drafting and De- sign Technol	13.7	18.8	0.9	48.3	16.2	2.1	234
Surveying Technol	7.0	15.5	3.9	70.5	2.3	0.8	129
Computer Technol	7.7	18.8	0.5	39.4	23.1	10.6	208
Electrical Techn	10.5	17.5	0.9	54.9	12.8	3.3	570

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Electronic Techn	5.8	15.1	1.5	34.6	21.1	21.9	1057
Elect/Electronic Technol.:Other	25.5	27.5	0.0	33.3	5.9	7.8	51
Electromechanical Technology	16.2	17.1	0.0	54.1	8.1	4.5	111
Instrumentation Technology	21.0	28.0	3.0	39.0	6.0	3.0	100
Heating & Cooling Tech,Solar Tech.	11.8	18.9	0.0	62.2	5.5	1.6	127
Air Pollution and Control Techn.	35.3	44.1	0.0	14.7	0.0	5.9	34
Sanitation Techn, Sanit. Chemistry	13.6	31.8	0.0	40.9	4.6	9.1	22
Water & Wastewat. Tech/Treatment	29.3	17.0	0.9	47.2	0.0	5.7	106
Envir. Control Techn.: Other	41.5	24.5	1.9	24.5	0.0	7.6	53
Industrial Techn/ Materials/Mechan	19.6	35.7	0.0	37.5	5.4	1.8	112
Manufacturing Tech Mfg. Processes	19.8	29.4	0.0	46.8	3.2	0.8	126
Plastic Technol	13.3	70.0	3.3	13.3	0.0	0.0	30
Welding Technol/ Theory/Metallurg	4.9	14.1	0.6	67.5	11.0	1.8	163
Industrial Production Tech:Oth	27.5	47.1	0.0	13.7	7.8	3.9	51
Occupat/Industrial Safety	29.7	29.7	0.0	32.4	0.9	7.2	111
Quality Control Technology	22.5	32.5	0.0	40.0	2.5	2.5	40

	Doct	Comp	LibA	CommC	Trade	SpecI	<u>N</u>
Aeronautical Tech	18.5	7.6	1.1	50.0	2.2	20.7	92
Automotive Techn	13.3	13.3	0.0	67.6	4.8	1.0	105
Mechan Design/ Machine Technol.	27.1	31.3	0.0	35.4	1.4	4.9	144
Mechanical and Related Tech:Oth	15.3	42.4	0.0	28.8	1.7	11.9	59
Mining Technolog	21.8	0.0	0.0	76.4	0.0	1.8	55
Petroleum Technol	53.3	33.3	0.0	6.7	0.0	6.7	15
Construction Tech	34.3	24.3	0.0	31.5	7.7	2.2	181
Engineering Tech: General	8.1	32.4	0.0	59.5	0.0	0.0	37
Engin. Tech.: Oth	18.3	19.2	0.8	42.5	15.8	3.3	120

FOREIGN LANGUAGES

African Languages	53.9	42.3	0.0	3.9	0.0	0.0	26
Chinese: Intro & Intermediate	49.5	26.3	9.5	2.1	0.0	12.6	95
Japanese: Intro & Intermediate	62.3	13.2	7.6	17.0	0.0	0.0	106
Chinese: Advanced	22.2	44.4	0.0	0.0	0.0	33.3	9
Japanese: Advanc.	60.9	8.7	30.4	0.0	0.0	0.0	23
Other Asiatic Languages	84.0	16.0	0.0	0.0	0.0	0.0	25

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Russian: Intro & Intermediate	61.8	22.1	7.4	2.3	0.9	5.5	217
Other Slavic Languages	88.5	7.7	3.9	0.0	0.0	0.0	26
Russian: Advanced & Lit.	78.3	13.2	8.5	0.0	0.0	0.0	106
German: Intro & Intermediate	38.3	36.0	11.8	11.2	0.3	2.5	1543
Scandinavian Lang Intro & Intermed	79.2	20.8	0.0	0.0	0.0	0.0	48
Dutch	27.3	45.5	27.3	0.0	0.0	0.0	11
German: Advanced & Lit.	48.4	39.4	7.3	2.9	0.0	2.0	246
Scandinavian Lan Advanced & Lit.	85.7	14.3	0.0	0.0	0.0	0.0	7
Germanic Langs: Other	100.0	0.0	0.0	0.0	0.0	0.0	4
Greek: Classical	16.1	35.8	29.0	0.0	0.0	19.1	162
Greek: Modern	100.0	0.0	0.0	0.0	0.0	0.0	16
Indic Languages	87.0	13.0	0.0	0.0	0.0	0.0	23
French: Intro & Intermediate	40.0	35.8	11.4	11.6	0.3	0.9	2438
Italian: Intro & Intermediate	54.7	26.5	4.4	13.0	0.0	1.5	276
Latin	53.4	34.5	11.2	0.5	0.0	0.5	223
Portuguese: Intr & Intermediate	95.7	2.1	0.0	2.1	0.0	0.0	47

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Spanish: Intro & Intermediate	34.8	37.2	8.9	17.1	0.4	1.7	3615
French: Advanced & Lit.	40.0	42.8	16.2	1.1	0.0	0.0	538
Italian: Advanced & Lit.	18.2	77.3	4.6	0.0	0.0	0.0	22
Portuguese: Adv. & Lit.	100.	0.0	0.0	0.0	0.0	0.0	9
Spanish: Advanced & Lit.	43.3	41.9	7.7	5.5	0.0	1.6	494
Spanish for Native Speakers	25.7	54.3	2.9	17.1	0.0	0.0	35
Native American Languages	50.0	16.7	33.3	0.0	0.0	0.0	6
Arabic: Intro & Intermediate	88.5	0.0	11.5	0.0	0.0	0.0	26
Hebrew: Intro & Intermediate	75.8	16.5	4.4	1.1	0.0	2.2	91
Arabic: Advanced	50.0	0.0	25.0	0.0	25.0	0.0	8
Hebrew: Advanced	90.0	0.0	0.0	0.0	0.0	10.0	20
Foreign Langs.: Other, Indetrm.	45.8	31.3	3.6	8.4	0.0	10.8	83

ALLIED HEALTH SERVICES

Dental Assisting	6.0	8.7	0.5	75.5	9.2	0.0	184
Dental Hygiene	23.2	28.1	0.0	47.3	0.5	0.9	224
Dental Lab Technology	21.3	6.7	0.0	60.0	5.3	6.7	75

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Oral/Dental Radiology	36.5	1.6	0.0	36.5	3.2	22.2	63
Dental Services: Other	0.0	12.8	0.0	87.2	0.0	0.0	47
Cardiovascular Technology	12.0	4.0	4.0	44.0	26.0	10.0	50
Emergency Medical Ambulance	6.9	13.8	1.7	67.2	5.2	5.2	58
Emergency Medical Paramedic	15.0	18.8	3.1	53.1	4.4	5.6	160
Radiologic (Med) Technologies	10.0	15.5	0.3	33.6	31.5	9.1	330
Respiratory Therapy Technology	0.0	6.3	0.0	87.5	6.3	0.0	32
Surgical Technol	7.4	40.7	0.0	40.7	7.4	3.7	27
Diagnost/Treatment Servs: Oth	16.7	9.3	3.7	33.3	22.2	14.8	54
Blood Bank/Hematology Technol	6.4	36.5	1.6	36.5	12.7	6.4	63
Chemistry Technol	20.0	25.0	0.0	38.3	10.0	6.7	60
Clinical Animal Tech, Animal Care	35.5	3.2	0.0	61.3	0.0	0.0	31
Medical Lab Tech	5.0	15.0	0.0	66.0	13.0	1.0	100
Medical Technol	39.6	31.5	0.9	18.0	5.4	4.5	111
Microbiol Tech/ Appl. Microscopy	26.2	30.8	3.1	30.8	7.7	1.5	65
Medical Lab Tech: Ocher	11.5	7.7	0.0	65.4	11.5	3.9	26

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Alcohol/Drug Abuse Treatment	41.7	42.4	0.7	14.6	0.0	0.7	144
Community Health, Hygiene/Services	16.1	46.7	5.9	25.6	2.2	3.6	559
Mental Health Assisting	7.9	13.2	2.6	76.3	0.0	0.0	38
Mental Health Technology	17.1	14.6	2.4	58.5	7.3	0.0	41
Rehabilitation Counseling	73.5	20.6	0.0	2.9	0.0	2.9	68
Population/Family Planning	56.3	28.1	6.3	6.3	0.0	3.1	32
Sign Lang. Interpret., AMESLAN	23.3	37.5	1.7	33.3	0.0	4.2	120
Mental Health/Human Servs: Other	22.3	25.9	2.7	42.0	0.9	6.3	112
Medical Assisting	3.4	3.4	0.0	63.6	29.6	0.0	88
Medical Office Management	14.3	1.8	0.0	55.4	26.8	1.8	56
Medical Records Technology	10.5	19.4	0.0	47.8	22.4	0.0	67
Pharmacy Assist., Dispensary	27.8	5.6	0.0	55.6	5.6	5.6	18
Allied Health Servs.:Other	32.0	28.0	0.0	24.0	4.0	12.0	25
Practical Nursing	1.0	6.7	0.0	61.5	30.8	0.0	195
Ophthalmic Servs. & Technology	0.0	8.9	0.0	55.5	0.0	35.6	101
Art Therapy	11.1	72.2	0.0	0.0	0.0	16.7	18

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Kinesiology, Exercise Physiol.	34.8	50.1	7.4	6.9	0.0	0.9	583
Music Therapy	40.6	50.0	3.1	6.3	0.0	0.0	32
Occupational Therapy	43.8	29.4	0.0	26.3	0.6	0.0	160
Physical Therapy	51.1	8.5	3.5	21.5	1.4	14.1	284
Recreational Therapy	25.5	40.4	4.3	27.7	0.0	2.1	47
Respiratory Therapy	0.0	2.2	0.0	94.5	3.3	0.0	91
Rehabil. Servs.: Other	32.4	42.9	0.0	6.7	7.6	10.5	105
Health Servs. & Sci: General	16.6	35.8	3.5	42.2	1.0	0.8	483
HPER: Intro., Gen	28.3	51.3	9.1	7.1	0.3	3.8	339
Athletic Injuries & Training	24.7	60.0	11.3	2.7	0.0	1.3	150
Adaptive Physical Education	28.3	53.3	11.7	5.8	0.0	0.8	120
Medical Terminology	14.3	11.1	0.8	56.4	15.9	1.6	126
Allied Health: Other	30.2	29.6	3.1	30.2	3.8	3.1	159

HEALTH SCIENCES

Audiology	51.5	45.2	3.0	0.3	0.0	0.0	303
Speech Pathology	46.7	50.7	0.9	1.4	0.2	0.2	641

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Speech-Lang Path	40.9	55.5	2.5	1.1	0.0	0.0	281
Audiol & Speech Pathology: Other	47.6	49.5	0.9	1.9	0.0	0.0	212
Clinical Anatomy	34.4	10.2	1.9	12.1	2.8	38.6	215
Clin/Med/Physiol- ogy	51.4	21.9	0.0	0.0	0.0	26.7	105
Clin. Microbio/ Medical Bacterio	54.9	18.8	0.5	6.3	3.1	16.5	224
Clinical Pathol- ogy	44.5	6.3	0.8	1.6	3.1	43.8	128
Clinical Physiol- ogy	30.3	8.0	0.8	4.0	6.0	51.0	251
Clinical Health Sci: Other	54.9	9.7	0.0	5.1	3.6	26.7	195
Chiropractic	0.0	0.0	0.0	15.0	0.0	85.0	220
Dentistry: Gener	51.1	5.4	0.0	5.1	0.0	38.4	315
Preventive Den- tistry	38.1	10.3	0.0	23.8	0.0	27.8	126
Endodontics	60.0	1.8	0.0	1.2	0.0	37.0	165
Oral/Maxial Face Surgery	65.8	2.1	0.0	1.0	0.0	31.1	193
Oral Pathology	57.3	7.7	0.0	12.0	0.0	23.1	117
Orthodontics	57.7	2.9	0.0	1.0	0.0	38.5	104
Pedodontics	61.2	3.1	0.0	0.8	0.0	34.9	129

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Periodontics	57.0	5.0	0.0	5.0	0.0	33.0	221
Prosthodontics & Restorative Dent	59.5	4.0	0	0.0	0.0	36.5	425
Operative Dent/ Oral Surgery	55.2	5.6	0.0	0.0	0.0	39.2	143
Dentistry: Other	59.3	1.2	0.3	4.7	0.0	34.6	344
Health Servs./ Hospital Admin.	37.3	34.6	0.5	9.2	2.2	16.2	185
Health Care Plan-ning	46.0	17.5	6.4	9.5	4.8	15.9	63
Medical Records Administration	54.2	4.2	0.0	37.5	0.0	4.2	24
Health Servs Ad-min.: Other	56.4	29.1	0.0	1.8	0.0	12.7	55
Medical Labora-tory	38.5	15.4	0.0	11.5	0.0	34.6	26
Medicine: General	41.0	10.6	4.8	8.0	10.6	25.0	188
Anesthesiology	31.7	4.9	7.3	6.1	3.7	46.3	82
Dermatology	19.6	0.0	2.0	0.0	13.7	64.7	51
Emergency Medi-cine	30.6	2.8	0.0	0.0	11.1	55.6	36
Family Practice	48.3	6.9	0.0	0.0	0.0	44.8	29
Immunology	59.6	24.0	0.0	2.1	3.4	11.0	146
Internal Medicine	51.4	6.7	1.9	2.9	5.7	31.4	105

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Obstetrics & Gynecology	32.3	2.0	1.0	3.0	12.1	49.5	99
Opthamology	29.3	1.7	1.7	0.0	5.2	62.1	58
Orthopedic	13.7	3.9	2.0	2.0	15.7	62.8	51
Otorhinolaryng./ Otolaryngology	37.5	6.3	0.0	0.0	6.3	50.0	16
Pathology	46.2	4.3	0.0	8.6	3.4	37.6	117
Pediatrics	26.9	2.8	1.9	2.8	8.3	57.4	108
Physical Medicine & Rehabilitation	45.5	4.6	0.0	0.0	0.0	50.0	22
Preventive Medi- cine	23.3	10.0	3.3	3.3	0.0	60.0	30
Psychiatry	29.7	5.4	1.8	3.6	5.4	54.1	111
Neurology	43.7	4.6	1.2	8.1	3.5	39.1	87
Radiology	46.3	3.8	0.6	1.3	5.0	43.1	160
Surgery	35.4	5.1	0.6	2.5	8.2	48.1	158
Hematology	43.3	2.3	0.0	0.0	16.7	36.7	30
Medicine: Other	39.3	8.2	1.8	1.8	7.3	41.6	219
Nursing: General	17.3	27.4	4.4	31.3	13.8	6.0	2133
Maternal/Pediatr Nursing	9.0	21.7	3.1	26.5	34.2	5.6	558

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Medical/Surgical Nursing	5.5	16.0	2.3	24.3	47.8	3.6	605
Nursing Admin.	21.2	34.9	1.5	3.0	34.9	4.6	66
Psychiatric/Mental Health Nurs	18.8	25.9	3.8	20.6	25.9	5.0	320
Pub/Community Health Nursing	34.8	31.9	3.2	6.5	6.5	17.2	279
Nursing: Other, Indeterminable	22.9	30.9	3.3	21.9	13.0	8.1	1010
Optometry	0.0	14.5	4.6	1.2	0.0	79.7	345
Osteopathic Medicine	2.0	0.0	0.0	0.0	0.0	98.0	50
Pharmacy	57.7	25.0	0.2	1.2	0.3	15.6	1204
Podiatry	0.0	0.0	0.0	0.0	0.0	100.0	42
Public Health Laboratory Science	35.4	43.8	0.0	4.2	0.0	16.7	48
Epidemiology	37.2	41.0	2.6	1.3	2.6	15.4	78
Pub Health Practice/Management	37.7	39.6	3.8	11.3	0.0	7.6	53
Public Health: Other	26.8	34.2	2.4	17.1	0.0	19.5	41
Veterinary Medicine	95.6	1.6	0.0	2.8	0.0	0.0	252
Clinic, Clerkship	37.3	10.9	2.6	20.2	3.1	25.9	193
Health Sciences:	36.9	19.1	4.8	10.7	4.8	23.8	84

	Doct	Comp	LibA	CommC	Trade	SpecI	N
HOME ECONOMICS							
Home Economics: General	48.6	43.2	0.0	7.5	0.7	0.0	146
Business Home Ec & Family Finance	45.4	42.3	6.2	6.2	0.0	0.0	97
HE: Family & Community Serve	7.7	76.9	0.0	11.5	0.0	3.9	26
Family/Consumer Management:Gen.	55.7	29.6	4.6	10.2	0.0	0.0	88
HE: Consumer Sci	37.7	39.9	3.7	11.9	2.2	4.5	268
HE: Food Science & Nutrition: Gen	40.2	30.6	4.8	18.2	5.3	0.9	435
HE: Food & Food Sciences	47.8	35.2	2.4	14.2	0.4	0.0	247
Dietetics/Human Nutrit. Services	32.6	33.7	3.9	19.7	7.3	2.8	178
HE: Human Nutrit.	30.3	34.6	3.5	19.0	8.9	3.8	694
HE: Food Sci./ Nutrit.: Other	68.9	22.2	0.0	8.9	0.0	0.0	45
HE: Human Envir/ Housing/Shelter	56.3	37.5	2.1	4.2	0.0	0.0	48
Household Equip- ment & Furniture	54.7	29.7	3.1	9.4	3.1	0.0	64
HE: Housing Fam- ily Housing	60.3	39.7	0.0	0.0	0.0	0.0	68
HE: Individual & Family Devel:Gen	45.3	27.8	3.2	19.0	2.8	1.9	536
HE: Family Coun- seling	34.1	47.1	8.2	5.9	0.0	4.7	85

	Doct	Comp	LibA	CommC	Trade	Spec1	N
HE: Family Relations	33.5	42.0	4.1	18.8	1.2	0.6	517
HE: Gerontologic Services	48.3	31.0	6.9	6.9	3.5	3.5	29
HE: Indiv. & Family Devel:Other	63.2	18.4	7.9	10.5	0.0	0.0	38
Textiles & Clothing: General	47.6	29.1	3.7	12.8	3.4	3.4	296
Fashion Design	33.8	17.2	4.0	19.9	8.6	16.6	151
Textile Science	34.4	24.8	3.2	12.0	1.6	24.0	125
Textiles & Cloth: Other	39.1	21.7	1.5	17.4	4.4	15.9	69
Home Economics: Missing, Indeterm	42.1	40.7	2.1	13.6	0.7	0.7	140

VOCATIONAL HOME ECONOMICS

VHE: Consumer/Homemaking:Gen.	38.5	38.5	0.0	15.4	0.0	7.7	26
VHE: Child Development	30.5	32.4	4.3	30.9	1.3	0.7	959
VHE: Clothing & Textiles	43.8	29.4	4.4	20.6	1.9	0.0	160
VHE: Consumer Ed	27.8	46.3	1.9	11.1	13.0	0.0	54
VHE: Family/Individual Health	36.1	35.1	1.0	26.8	1.0	0.0	97
VHE: Family Living/Parenthood	25.6	30.4	4.2	33.0	3.3	3.6	336
VHE: Family Nutrition/Food	35.5	41.9	8.9	11.3	2.4	0.0	124

	Doct	Comp	LibA	CommC	Trade	SpecI	N
VHE: Home Management	35.4	53.1	4.2	7.3	0.0	0.0	96
VHE: Housing/Furnishings/Equip	35.5	44.9	0.0	15.9	3.6	0.0	138
VHE: Child Care Services: Gen.	13.3	31.9	2.7	48.7	1.8	1.8	113
VHE: Child Care Management	6.3	56.3	0.0	37.5	0.0	0.0	16
VHE: Child Care Servs.: Other	0.0	35.7	7.1	50.0	7.1	0.0	14
VHE: Clothing Production/Servs	26.1	44.9	1.5	21.7	0.0	5.8	69
Commercial Garment Construct.	35.2	16.7	3.7	27.8	11.1	5.6	54
Custom Tailoring & Alteration	23.5	32.4	8.8	14.7	20.6	0.0	34
Fashion/Fabric Coordination	14.6	12.2	2.4	41.5	12.2	17.1	41
Food Production/Servs.: General	35.1	27.5	3.1	27.5	2.3	4.6	131
Baking	0.0	6.1	3.0	69.7	6.1	15.2	33
Chef/Cook	4.0	6.9	0.0	57.4	26.7	5.0	101
Food Service & Catering	24.2	22.0	0.0	43.6	5.9	4.3	186
Food Product./Services: Other	12.9	17.7	0.0	62.9	3.2	3.2	62
Floral Design	40.6	28.1	6.3	18.8	6.3	0.0	32
Home/Interior Decorating	37.3	15.7	3.9	41.2	2.0	0.0	51
Vocat. Home Econ: Other	20.4	32.7	0.0	16.3	2.0	28.6	49

	Doct	Comp	LibA	CommC	Trade	Spec1	N
INDUSTRIAL ARTS							
Industrial Arts: General	28.1	63.2	0.0	8.8	0.0	0.0	57
IA: Construction	22.9	4.2	2.1	68.8	0.0	2.1	48
IA: Drafting and Design	16.7	38.5	1.3	39.7	3.9	0.0	78
IA: Electricity/Electronics	1.2	3.1	0.0	79.3	16.5	0.0	164
IA: Energy, Power	10.3	72.4	0.0	17.2	0.0	0.0	29
IA: Basic Graphics, Mech. Drawing	34.6	27.3	5.5	20.0	9.1	3.6	55
IA: Manufacturing	19.5	43.9	2.4	22.0	9.8	2.4	41

LAW

Law [incl. torts contracts, etc.]	44.4	25.3	0.9	8.5	0.4	20.5	2991
Legal Assisting, Para-legal	44.1	20.3	4.5	19.3	8.9	3.0	202
Law: Other	44.2	24.2	2.0	10.2	1.6	17.9	765

ENGLISH/LITERATURE IN ENGLISH

Literature: Gen., World Lit.	29.4	41.5	8.2	18.0	0.5	2.5	3554
Poetry: General/ Epic, Lyric, etc.	36.4	39.7	8.9	14.4	0.0	0.7	305
Fiction: General, Short Story, etc	39.8	39.5	5.5	13.6	0.3	1.3	893
Drama: General, Intro.	38.2	34.5	10.3	14.1	0.3	2.5	319

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Non-Fict. Prose, Biog., Essay	36.1	41.0	9.6	9.6	0.0	3.6	83
Classical Lit. in Translation	47.2	36.3	12.7	3.7	0.0	0.0	487
The Bible as Lit	17.2	36.9	23.0	20.5	0.8	1.6	122
Comparative Lit., Euro Lit./Transl	48.0	31.6	10.3	7.0	0.0	3.1	456
Comp. Lit.: Non- Western/3rd Wrld	27.7	40.4	17.0	12.8	0.0	2.1	94
Freshman Composi- tion	22.4	33.8	5.4	35.4	0.6	2.5	14343
Spoken/Written Eng., Adv. Grammar	9.1	39.4	5.6	40.9	3.3	1.8	396
Creative Writing	35.9	36.6	8.8	16.5	0.6	1.6	691
Linguistics: Gen, Semantics, Philol	44.9	44.7	6.1	3.4	0.3	0.6	790
American Litera- ture	31.7	40.1	8.6	17.1	0.6	1.9	2445
Afro-American Literature	24.7	43.8	10.3	17.8	1.4	2.1	146
English Litera- ture	29.8	41.4	11.2	16.4	0.3	1.0	2256
Shakespeare	42.0	38.0	11.1	8.4	0.4	0.2	560
Pub Speaking, De- bate, Oral Interp	25.9	41.3	6.5	22.2	0.7	3.3	1642
Voice & Articula- tion	29.2	45.3	7.8	14.0	2.5	1.2	243
Technical and Business Writing	24.6	29.7	1.9	32.6	5.1	6.1	838

	Doct	Comp	LibA	CommC	Trade	SpecI	N
English as a Second Language	20.0	48.9	0.0	31.1	0.0	0.0	45
Criticism, Literary History, etc.	36.2	44.3	15.4	3.4	0.7	0.0	149
Remedial English: Gen., Lang. Skills	6.3	24.0	4.7	56.7	6.9	1.4	2606
Basic Reading, Reading Improve.	6.6	27.2	4.6	59.0	1.6	1.1	1318
Remedial/Basic Speech	14.0	45.0	8.9	31.4	0.0	0.7	271
Other Determinable Lit Topics	31.3	42.8	11.9	9.7	2.0	2.4	505
Science Fiction, Fantasy	30.2	45.0	2.3	19.4	0.8	2.3	129
Folklore, Mythology	35.8	42.4	8.0	13.3	0.0	0.7	151
Lit. & Film/Film as Literature	35.7	40.0	5.7	17.1	0.0	1.4	70
Letters: Missing, Indeterminable	24.0	27.9	8.1	29.8	5.8	4.4	1576

LIBERAL/GENERAL STUDIES

Liberal Arts & Sciences	49.3	20.1	18.8	10.4	0.0	1.4	144
General Studies	9.0	45.1	14.3	30.1	0.0	1.5	133

LIBRARY AND ARCHIVAL SCIENCES

Library/Archival Sci: General	53.5	24.6	0.9	16.7	3.5	0.9	114
Archival Science	57.1	9.5	9.5	9.5	14.3	0.0	21

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Library Science	32.7	50.1	4.5	7.9	1.1	3.7	355
Museology	66.7	24.2	3.0	6.1	0.0	0.0	33
Library/Arch Sci: Other, Indeterm.	39.0	34.2	0.0	22.0	4.9	0.0	41

BIOLOGICAL SCIENCES

Biology: General Intro, Bot+Zoo	25.5	37.9	7.0	28.0	0.5	1.2	7085
Human Biology	23.6	40.2	5.4	27.6	1.9	1.3	373
Biochemistry	56.2	26.8	4.3	4.1	0.6	8.0	835
Biophysics, Biomechanics	39.0	29.3	7.3	7.3	0.0	17.1	41
Botany: General, Introduction	34.8	37.5	6.4	20.1	0.1	1.1	882
Plant Pathology	50.9	31.6	0.0	7.0	0.0	10.5	57
Plant Physiology	57.4	31.2	4.9	1.6	0.0	4.9	122
Plant Morphology	50.0	43.3	0.0	6.7	0.0	0.0	30
Plant Taxonomy/ Systematics	53.9	37.3	2.0	4.9	1.0	1.0	102
Botany: Other, Indeterminable	37.3	43.6	7.3	9.1	0.9	1.8	110
Cell Biology	48.2	35.0	7.2	4.8	0.5	4.3	417
Molecular Biology	55.7	33.0	8.0	2.3	0.0	1.1	88
Microbiology	36.2	28.6	5.6	20.2	4.7	4.7	1354

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Bacteriology, Virology	41.5	46.8	2.4	6.5	2.0	0.8	248
Anatomy: Plant & Animal	34.6	30.6	5.9	17.4	2.6	8.9	862
Biometrics, Bio- statistics	59.1	23.6	0.9	1.8	0.9	13.6	110
Ecology, Environ. Biology	43.9	35.4	6.9	12.2	0.2	1.3	858
Embryology, De- velop. Biology	38.3	38.3	12.1	4.4	1.0	6.0	298
Endocrinology	55.8	14.3	3.9	1.3	7.8	16.9	77
Histology, Cytology	39.5	27.2	7.7	7.7	2.1	15.9	195
Aquatic/Marine Biol., Limnology	28.2	37.2	13.8	17.0	0.0	3.7	188
Neurosciences	54.2	15.8	3.3	0.8	3.3	22.5	120
Parasitology	47.9	33.6	6.4	5.0	1.4	5.7	140
Toxicology	49.0	38.8	0.0	0.0	2.0	10.2	49
Evolution	56.0	27.5	9.8	6.2	0.0	0.5	193
Field Biol/Botany Field Nat. Hist.	36.2	34.1	5.8	21.7	0.0	2.2	138
Genetics: Human, Plant, Molecular	47.5	39.3	7.3	3.3	0.5	2.2	862
Misc. Spec. Life Science: Other	34.2	38.6	8.8	8.8	2.6	7.0	114
Zoology: General, Introduction	35.3	34.8	7.4	21.1	0.2	1.2	1453

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Entomology	73.9	17.2	2.5	4.4	0.0	2.0	203
Pathology: Human and Animal	57.6	25.3	1.0	6.1	0.0	10.1	99
Pharmacology: Human & Animal	44.5	17.7	0.8	10.9	8.8	17.2	476
Physiology: Human & Animal	48.3	30.0	5.6	8.0	0.7	7.5	1054
Animal Behavior, Ethology	56.6	27.9	13.1	2.5	0.0	0.0	122
Ornithology	60.0	22.2	13.3	4.4	0.0	0.0	45
Zoology: Other	59.7	26.3	7.0	7.0	0.0	0.0	171
Anatomy & Physiol Applied Anatomy	14.8	30.2	6.1	37.9	8.2	2.8	1763
Plants & Envir/ Civilization	58.0	35.8	3.7	2.5	0.0	0.0	81
Pathophysiology/ Intro. Disease	26.3	35.1	7.0	14.0	6.1	11.4	114
Organic Biochem/ Physiol.Chemist.	27.9	55.0	4.3	11.4	0.7	0.7	140
Human Growth & Development	13.2	45.2	8.2	28.4	2.1	2.9	515
Life Sci: Missing Indeterminable	31.9	40.0	10.3	16.2	0.0	1.6	612

MATHEMATICS

Pre-Collegiate Math: General	17.2	42.0	5.5	33.6	1.2	0.4	2274
Arithmetic	10.5	24.9	3.1	57.6	3.9	0.0	361

	Doct	Comp	LibA	CommC	Trade	SpecI	<u>N</u>
Pre-Colleg. Algebra	13.6	23.1	1.5	59.5	1.0	1.2	2031
Plane Geometry	18.2	33.7	4.4	39.2	1.7	2.8	181
Developmental Math	19.5	33.7	4.9	35.8	3.2	3.0	508
Liberal Arts Math Intro. Coll. Math	14.5	41.2	7.7	30.5	0.3	5.8	1667
Finite/Discrete Mathematics	34.3	37.8	4.3	20.5	1.0	2.1	580
College Algebra	22.0	34.0	4.0	38.2	0.5	1.3	2979
Pre-Calculus, Analyt. Geometry	33.7	36.3	8.2	20.1	0.2	1.6	902
Statistics, Probability	36.7	39.4	6.5	13.3	0.2	4.0	2251
Calculus, Differential Equations	44.9	30.2	6.0	12.9	0.3	5.7	5732
Calculus for Life Sci/Econ/Busin.	49.8	35.7	1.0	12.1	0.0	1.3	305
Advanced College Math Topics	50.1	35.5	6.7	3.3	0.2	4.2	818
Technical/Vocat. Math	4.4	9.5	0.3	72.6	8.5	4.8	798
Business Math: Pre-Collegiate	0.1	11.6	2.8	72.5	12.1	0.9	973
Business Math: Collegiate	34.6	41.6	1.2	17.1	1.2	4.4	592
Number Systems/Structures	18.8	61.7	4.5	12.8	0.0	2.3	133
Math: Missing, Indeterminable	32.1	28.0	6.7	20.4	7.6	5.3	1395

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Air Force Sci & Training	29.0	34.9	0.0	2.0	0.2	33.9	496
Coast Guard Sci.	0.0	0.0	0.0	0.0	0.0	100.0	11
Military Sci	27.3	43.0	3.4	6.6	0.9	18.8	560
Naval Science	36.5	9.1	0.0	0.9	0.0	53.6	351
Military Science: Indeterminable	43.5	33.1	0.7	4.8	0.0	17.9	145
Military Technols	22.2	51.9	0.0	0.0	0.0	25.9	27

INTER/MULTI-DISCIPLINARY

Gen./Natural/Integrated Sci	29.2	34.6	8.4	23.0	3.6	1.3	610
Gen. Laboratory, Instrumentation	22.2	25.0	25.0	22.2	5.6	0.0	36
Intro. Technol., Applied Science	7.4	46.3	0.0	37.0	7.4	1.9	54
Clinical Pastoral Care	9.1	13.0	5.2	1.3	2.6	68.8	77
Humanities: Gen.	27.0	33.5	9.9	27.0	1.2	1.4	1491
Humanities & Social Science	27.7	45.1	13.1	9.8	0.0	4.6	153
Humanities & Arts	24.1	31.7	13.8	24.8	0.0	5.5	145
Popular Culture	36.5	42.4	2.4	16.5	2.4	0.0	85
Peace Studies, Conflict Resolut	40.7	34.6	6.2	14.8	0.0	3.7	81

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Women's Studies	35.7	42.6	6.3	14.5	0.0	1.0	510
Future Studies, Futuristics	43.1	30.8	18.5	4.6	0.0	3.1	65
Sci, Technol, & Society	53.7	36.4	4.8	3.1	0.0	2.0	354
Environmental Studies/Science	37.6	38.8	6.2	13.8	0.3	3.3	662
Sports/Leisure Studies	43.5	44.9	4.1	6.8	0.0	0.7	147
Interdisc. Stud- ies: Other	32.7	39.1	11.9	12.9	1.5	2.0	202

RECREATION

Recreation/Parks, Community Recrea	29.5	42.3	2.7	24.8	0.0	0.7	149
Outdoor Recreat., Camp Counseling	28.6	43.2	3.0	24.1	0.0	1.1	266
Parks and Recrea- tion Management	26.7	36.1	4.1	32.0	0.0	1.1	266
Water Recreation, Aquatics Mgmnt.	52.0	28.0	4.0	12.0	4.0	0.0	25
Sports Officiat., Umpiring,Referee	9.4	40.3	6.8	43.5	0.0	0.0	191
Recreat. Leader- ship	17.7	50.0	1.5	30.9	0.0	0.0	68
Recreat. Practi- cum,Field Exper.	28.8	40.9	3.0	27.3	0.0	0.0	66
Recreat./Parks: Other, Indeterm.	35.7	48.0	4.1	10.2	0.0	2.0	98

	Doct	Comp	LibA	CommC	Trade	SpecI	N
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BASIC SKILLS

Basic Skills: Gen	10.0	52.0	4.0	30.0	2.0	2.0	50
Academic/Intellectual Skills	12.5	44.4	2.8	31.7	1.7	6.9	360
Job Seeking/Changing Skills	12.2	24.4	2.7	48.5	11.5	0.8	262
Career Exploration	16.7	31.9	1.4	48.6	1.4	0.0	72
Typing as Basic Skill	25.3	56.1	1.0	15.7	0.5	1.5	198

HEALTH-RELATED ACTIVITIES

Health & Phys. Practice/Hygiene	12.3	44.5	4.0	38.5	0.3	0.4	1856
Sex & Birth-Related Practices	43.8	21.4	1.1	27.0	3.4	3.4	89
Mental Hygiene	12.4	65.7	12.4	8.6	1.0	0.0	105
Aerobics, Jogging Body-Building	17.3	32.0	3.4	44.5	0.2	2.6	1831
First Aid, Life-Saving, Safety	18.1	43.2	4.6	31.7	1.5	0.9	1383
Drug/Alcohol Abuse Prevention	22.1	60.0	3.5	12.4	0.0	2.1	145
Adapted Physical Education	31.4	41.2	5.9	21.6	0.0	0.0	51

INTERPERSONAL SKILLS

Interpers. Skills Applied Psychol.	8.5	21.3	3.5	57.3	6.8	2.5	708
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	Doct	Comp	LibA	CommC	Trade	SpecI	N
Relations: Love, Sex, Job	26.1	20.6	29.4	17.8	5.6	0.6	180
Assertiveness, Leadership	27.1	31.3	7.3	28.1	0.0	6.3	96

LEISURE AND RECREATIONAL ACTIVITIES

Leisure & Recre. Activities: Gen.	12.4	45.2	8.8	32.4	0.4	0.8	250
Leisure & Recrea- tional Crafts	20.4	44.9	2.0	32.7	0.0	0.0	49
Games	15.5	54.1	4.7	25.7	0.0	0.0	148
Physical Educat. Activities	19.7	39.6	6.2	30.6	1.0	2.8	18279
Self-Defense, Karate, Judo, etc.	20.7	32.5	2.9	42.0	0.4	1.6	517
Equestrian Activs	33.1	37.1	4.0	25.8	0.0	0.0	124
Yoga, Meditation	27.3	32.2	2.5	38.0	0.0	0.0	121
Scuba/Skin Diving	27.3	36.0	3.7	31.1	0.6	1.2	161
Fishing, Angling	20.7	51.7	3.5	24.1	0.0	0.0	29
Riflery, Pistol (non-military)	25.5	47.3	0.0	23.6	1.8	1.8	55
Recreat/Leisure Activs.: Other	30.5	24.2	9.5	32.6	0.0	3.2	95
Varsity Ath.: Football/Basketb	16.1	43.3	6.0	27.2	0.0	7.4	298
Varsity Ath.: Oth Sports	16.9	34.4	11.8	33.3	1.1	2.5	279

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
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PERSONAL AWARENESS

Self-Awareness, Human Potential	10.7	27.6	11.8	45.0	3.2	1.6	373
Coping Skills, Stress Mngmnt.	18.6	37.1	10.0	31.4	2.9	0.0	70
Personal Deci- sion Making	29.3	31.7	4.9	29.3	4.9	0.0	41
Pers. Appearance, Charm, Grooming	10.2	15.9	3.7	50.8	19.1	0.4	246
Personal Values, Life Styles	6.3	53.1	6.3	12.5	21.9	0.0	32

PHILOSOPHY

Intro. Philosophy	24.4	40.1	9.4	23.8	0.2	2.1	1996
Ethics, Moral Phil.	30.9	38.8	10.5	11.7	2.8	5.3	864
Logic, Formal Reasoning	37.0	37.9	6.8	16.1	0.3	2.0	1014
Aesthetics, Phil of Art	30.3	40.3	16.8	7.6	1.7	3.4	119
Metaphysics, Epistemology	43.4	44.0	5.7	4.4	0.0	2.5	159
Philosophy of Language	56.9	23.5	9.8	5.9	0.0	3.9	51
Hist. of Philos.: General	23.0	37.8	22.2	11.9	0.0	5.2	135
Ancient & Mediev Philosophy	41.3	36.3	15.6	6.3	0.0	0.6	160
Phil: Rennais. through 19th Cnt	42.1	36.5	15.1	4.8	0.0	1.6	126

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Contemp. Phil.: Analyt, Exist, etc	36.1	42.2	16.9	3.6	0.0	1.2	166
Non-Western Phil	46.2	36.9	10.8	6.2	0.0	0.0	65
Philosophy of Ed	34.3	49.7	9.1	2.8	0.0	4.2	143
Phil. of Science	46.5	36.4	11.1	3.0	0.0	3.0	99
Philosophy of Re- ligion	31.3	34.4	10.7	16.0	0.0	7.6	131
Philos.: Indeter- minable, Missing	30.5	41.2	10.7	12.7	0.4	4.5	908

RELIGIOUS STUDIES

Religion: Gen., Comparative	22.5	42.3	17.6	12.8	2.0	2.7	1032
Non-Western Relig	36.5	38.9	19.1	4.8	0.0	0.8	126
Mormon Texts and History	83.7	0.0	0.0	16.3	0.0	0.0	123
Christianity: all Topics	16.2	32.8	33.1	7.6	1.3	8.9	314
Judaism: all Topics	46.8	30.7	16.1	3.2	0.0	3.2	62
Religious Ethics	8.3	65.3	9.7	5.6	1.4	9.7	72
Philosophy & Rel- gion: Other	21.7	55.3	14.3	3.1	1.2	4.4	161

THEOLOGY

Biblical Langs.: Seminary/Divin.	8.8	18.4	27.9	1.5	0.7	42.7	136
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	Doct	Comp	LibA	CommC	Trade	Spec1	N
Bible Studies, Sacred Scripture	8.0	30.3	25.5	7.0	1.9	27.3	2652
Missionary Stud- ies, Evangelism	4.2	10.0	20.9	7.9	2.1	55.0	191
Religious Educa- tion	4.2	23.8	15.0	1.1	2.1	53.8	379
Religious Music	4.5	31.5	24.7	3.4	2.3	33.7	89
Theological Stud- ies	9.1	20.4	18.7	3.9	2.5	45.4	1277
Christian Living/ Activities	5.7	35.8	30.6	6.6	0.4	21.0	229
Theology: Other	14.4	37.7	11.4	3.0	1.8	31.7	167

PHYSICAL SCIENCES

Physical Sci.: General	19.7	44.2	5.8	28.4	0.4	1.6	1735
Astronomy	41.8	34.6	4.5	17.2	0.2	1.8	1270
Astrophysics	33.3	33.3	5.6	11.1	0.0	16.7	36
Atmospheric Sci., Meteorology	49.9	35.8	1.5	10.0	0.0	2.8	469
Chemistry: Gen.	37.8	33.0	4.9	19.5	1.0	3.7	6643
Analytical Chem.	38.1	44.8	6.0	9.2	0.5	1.5	619
Inorganic Chem.	20.4	36.3	9.3	31.0	0.4	2.7	452
Organic Chemistry	52.9	33.0	5.7	6.9	0.2	1.3	2646

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Pharmaceutical Chemistry	65.2	23.9	0.0	0.9	0.0	10.0	230
Physical Chem.	54.7	32.3	8.1	0.7	0.0	4.2	430
Chemistry: Other Determ. Topics	37.4	46.0	1.2	12.1	0.6	2.9	174
Chem: Research, Independ. Study	46.4	47.0	6.6	0.0	0.0	0.0	151
Applied Chemistry Lib Arts Chem	28.3	37.2	9.3	24.0	1.2	0.0	258
Chem. for Nursing & Allied Health	29.0	30.7	3.2	22.6	4.8	9.7	62
Chem.: Missing, Indeterminable	37.0	43.8	6.3	9.4	1.6	2.1	192
Geology: General	40.1	39.7	5.3	13.6	0.0	1.3	2101
Geochemistry	52.4	38.1	2.4	0.0	0.0	7.1	42
Geophysics & Seismology	41.0	32.1	3.7	14.7	0.0	5.5	109
Paleontology	54.3	31.8	5.4	7.0	0.0	1.6	129
Mineralogy, Petrology	47.7	38.3	8.1	4.0	0.0	2.0	149
Geological Sci.: Other	39.7	39.7	8.5	12.1	0.0	0.0	141
Metallurgy	9.5	27.0	0.0	43.2	12.2	8.1	74
Oceanography	37.4	32.0	3.2	14.2	0.0	13.3	444
Earth Science	29.1	52.1	3.2	14.6	0.3	0.7	687

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Misc. Physical Sciences: Other	65.6	9.4	9.4	3.1	0.0	12.5	32
Physics: General Introductory	42.1	31.3	5.4	14.3	0.9	6.1	4558
Atomic/Nuclear/Molecular Physic	50.0	20.6	9.8	6.9	5.9	6.9	102
Optics	57.7	15.4	5.8	11.5	0.0	9.6	52
Acoustics, Physics of Music	42.3	42.3	5.8	3.9	0.0	5.8	52
Thermal Sci/Thermodynamics	62.1	21.6	3.9	2.6	0.4	9.5	232
Elect & Magnet.: Intermediate	53.6	25.6	4.8	5.6	0.0	10.4	125
Modern Physics	71.2	17.3	3.9	0.0	0.0	7.7	52
Classical Mechanics: Intermed.	64.7	22.1	4.4	2.9	0.0	5.9	68
Quantum Physics	53.1	37.5	3.1	3.1	0.0	3.1	32
Physics: Other, Indeterminable	41.0	38.3	4.7	7.8	1.2	7.0	256
Planetary Science	28.0	16.0	4.0	0.0	0.0	52.0	25
Physical Science: Other	33.9	24.2	11.3	27.4	0.0	3.2	62

SCIENCE TECHNOLOGIES

Biological Technologies: All	9.5	66.7	9.5	9.5	0.0	4.8	21
Nuclear Technologies: All	31.7	7.3	0.0	26.8	31.7	2.4	41

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Chemical Technols	27.3	15.2	0.0	42.4	3.0	12.1	33
Metallurgical Technologies	26.3	10.5	0.0	7.9	52.6	2.6	38

PSYCHOLOGY

Psychology: Gen. Behavioral Sci.	22.4	33.1	6.9	33.7	1.4	2.5	8123
Clinical Psychol.	31.8	45.5	5.8	5.8	0.6	10.5	343
Cognitive Psych.	44.0	41.5	9.2	1.3	1.3	2.7	477
Counseling & Community Psychol.	26.5	43.7	15.8	5.6	0.5	7.9	215
Developmental Psych.	25.7	46.9	8.6	16.0	0.7	2.2	2556
Experimental Psy, Research Methods	40.6	43.6	9.6	3.4	0.0	2.8	500
Industrial & Org Psych.	31.9	48.0	4.9	7.8	1.5	5.9	204
Personality Psych	36.3	38.8	8.3	13.2	1.5	1.8	1311
Abnormal Psychol. Psy of Deviance	31.6	48.5	8.6	9.3	0.3	1.8	1224
Human Sexuality/ Sexual Behavior	35.2	42.4	0.3	17.1	1.3	3.6	304
Physiological Psy Psychobiology	44.5	43.1	6.2	3.8	0.3	2.1	339
Psycholinguistics Psych & Language	42.4	54.4	3.3	0.0	0.0	0.0	92
Psychometrics, Psych Testing	30.9	58.0	8.2	0.0	0.5	2.4	207

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Psychopharmacol., Drugs & Behavior	40.8	51.0	2.0	0.0	0.0	6.1	49
Quantitative Psy. Psych Statistics	43.9	43.6	8.0	2.8	0.4	1.4	287
Social Psych, En- vironmental Psy	38.8	38.2	7.7	13.0	0.6	1.7	1605
History of Psych	25.8	60.6	12.9	0.0	0.0	0.8	132
Psych Field Work	41.4	29.0	4.1	6.9	0.0	18.6	145
Psych Seminars, Colloquia, etc.	46.9	34.6	10.5	4.8	0.0	3.2	373
Psych: Missing, Indeterminable	36.6	35.2	6.5	14.5	0.9	6.4	643

PROTECTIVE SERVICES

Correctional Ad- ministration	6.7	46.7	0.0	44.4	0.0	2.2	45
Corrections, Penology	10.0	48.1	1.0	38.8	0.0	2.1	289
Admin. of Justice Court Administr.	20.2	26.2	2.0	50.8	0.0	0.8	248
Criminal Justice Studies	28.1	42.3	2.6	25.9	0.0	1.1	274
Criminalistics, Evidence	7.2	23.4	0.8	65.7	1.1	1.9	376
Forensic Studies/ Chem/Bio/Med/Sci	5.9	41.2	0.0	47.1	2.9	2.9	34
Law Enforcement: Gen Police Train	10.0	24.3	0.2	61.4	0.9	3.2	568
Law Enforcement/ Police Administr	14.5	29.0	1.0	52.5	0.0	3.0	200

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Security Services	4.4	26.1	0.0	56.5	0.0	13.0	23
Internships, Field Experience	12.3	49.1	0.0	38.6	0.0	0.0	57
Criminal Law & Procedure: Police	18.8	29.0	0.7	48.6	0.0	2.9	138
Police/Community Relations	7.4	26.5	0.0	64.7	0.0	1.5	68
Traffic Law/Contr Management	6.3	24.2	0.0	67.4	2.1	0.0	95
Juvenile Justice	15.3	31.5	0.8	49.2	0.0	3.2	124
Narcotics, Drug Enforcement	13.6	18.2	4.6	50.0	0.0	13.6	22
Criminal Justice: Other & Indeterm	20.3	39.0	1.7	35.6	0.0	3.4	59
Fire Control and Safety Technol	0.0	6.3	0.0	93.8	0.0	0.0	80
Fire Protection Administration	6.5	3.2	0.0	90.3	0.0	0.0	31
Firefighting	4.9	0.0	0.0	95.1	0.0	0.0	41
Fire Protection: Other, Indeterm.	0.0	0.0	0.0	100.0	0.0	0.0	26
Protect. Servs.: Missing, Indet.	0.0	33.3	0.0	66.7	0.0	0.0	15

PUBLIC AFFAIRS

Community Servs., Organizations	41.3	38.3	3.6	13.3	0.0	3.6	196
Intl Organiza- tions/Service	50.0	37.5	8.3	2.1	0.0	2.1	48

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Public Admini- stration/Mngmt	51.7	40.8	2.0	2.5	0.5	2.5	441
Public Policy Studies	57.1	24.8	9.6	5.1	0.0	3.5	198
Public Works (Sanit, Hlths.)	46.2	25.6	0.0	15.4	7.7	5.1	39
Social Work: Gen	36.5	47.4	10.0	5.5	0.0	0.7	1001
Medical Social Work	31.8	54.6	4.6	6.8	0.0	2.3	44
Social Welfare	41.3	52.2	4.4	1.1	0.0	1.1	92
Social Work Practicums	52.2	40.2	4.4	2.2	0.0	1.1	92
Research in Soc. Work/Welfare	54.1	35.1	5.4	0.0	0.0	5.4	37
Social Work: Oth	39.0	52.0	5.0	2.0	0.0	2.0	100
Public Affairs: Other, Indeterm.	49.2	27.0	3.2	15.9	0.0	4.8	63

SOCIAL SCIENCES

Social Sciences: General	12.0	25.1	8.1	53.1	0.5	1.2	774
Anthropol.: Gen, Ascent of Man	46.2	34.5	6.5	11.2	0.4	1.2	1568
Cultural Anthropol, Ethnology	32.3	36.4	6.3	20.8	1.0	3.2	1002
Physical/Biolog/ Anthropology	42.5	24.5	1.6	31.3	0.0	0.0	367
Non-Western Peo- ples & Cultures	43.5	34.8	6.5	15.2	0.0	0.0	46

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Native Amer (N&S) Peoples & Cult.	45.7	37.2	5.3	11.7	0.0	0.0	94
Lang, Linguistics and Culture	49.1	43.9	3.5	1.8	0.0	1.8	57
Anthro Readings, Research	88.6	11.4	0.0	0.0	0.0	0.0	70
Anthropology:Oth, Indeterminable	36.2	50.0	7.7	3.9	0.0	2.3	130
Archaeology	55.3	30.6	7.2	5.1	0.0	1.7	235
Criminology	28.6	48.0	6.6	14.6	0.0	2.2	789
Demography	38.9	48.2	5.6	6.2	0.0	1.2	162

ECONOMICS

Economy & Society	29.3	39.4	8.0	20.7	1.2	1.4	502
Economics: Princs	31.2	36.4	5.4	23.2	0.8	3.1	6006
Intermed. Microec	50.7	37.0	4.6	5.2	0.0	2.5	732
Intermed. Macroec	51.7	36.2	7.6	2.8	0.0	1.7	354
Economic Stats	47.4	47.4	4.7	0.0	0.0	0.5	192
Econometrics, Forecasting	64.4	28.8	6.8	0.0	0.0	0.0	59
Public Finance	57.8	34.5	6.0	1.7	0.0	0.0	116
Interntl Econon/ Finance/Trade	53.0	32.2	9.6	3.5	0.0	1.7	115

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Monetary Theory, Fiscal Policy	40.6	53.1	1.6	0.0	0.0	4.7	64
Environ & Nat. Resource Econ	45.9	40.1	7.0	2.6	0.0	4.5	157
Labor and Human Resource Econ	45.8	42.9	8.9	1.2	0.0	1.2	168
Money & Banking	39.5	46.9	5.6	5.0	0.7	2.3	605
History of Econ Thought/Doctrine	36.8	49.1	12.3	0.0	0.0	1.8	57
Comparative Econ	37.9	41.4	14.9	1.2	1.2	3.5	87
Econ Development	50.8	29.5	13.1	3.3	0.0	3.3	61
Economics: Other Determinable Top	45.0	34.9	6.2	4.6	1.0	8.5	307
Economics: Miss- ing	49.0	26.5	18.1	3.2	0.7	2.6	155

GEOGRAPHY

Geography: Gen, Combined Topics	29.8	47.5	4.4	15.7	0.5	2.2	1972
Remote Sensing, Anal. Cartography	46.6	48.9	0.0	2.3	1.1	1.1	178
Cultural Geograph	27.3	49.8	2.9	18.5	1.5	0.0	205
Physical Geograph	36.0	40.8	2.1	21.1	0.0	0.0	677
Economic Geograph	42.3	40.4	3.2	12.2	1.3	0.6	156
Urban Geography	43.3	45.6	2.2	6.7	2.2	0.0	90

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Geog. of North America	35.4	49.0	2.3	12.9	0.0	0.3	302
Geog. of Europe, USSR	37.7	43.4	1.9	15.1	0.0	1.9	53
Geog. of Africa, Near East	34.4	53.1	3.1	6.3	0.0	3.1	32
Geog. of Asia, Pacific	37.5	37.5	0.0	18.8	0.0	6.3	32
Geog. of Latin America	40.0	55.0	2.5	2.5	0.0	0.0	40
Geography: Other	59.4	34.8	1.5	1.5	0.0	2.9	69

HISTORY

World Hist/West Civilization	19.9	39.8	9.5	27.5	0.3	3.0	4614
Ancient History	31.5	44.9	11.7	9.6	0.2	2.3	575
Intell/Cult Hist	29.6	51.5	5.2	9.0	0.9	3.9	233
Economic/Business History	41.9	37.2	11.6	7.6	0.6	1.2	172
History of Relig.	19.6	29.1	12.3	11.4	2.3	25.5	220
Historiography, Research Meths.	34.8	43.8	13.5	2.8	0.0	5.1	178
Hist of Sci, Math & Technology	43.0	40.9	8.8	3.6	0.0	3.6	193
U.S. History Surveys	20.4	39.4	6.1	33.0	0.2	0.8	6483
U.S. Hist: Topics thru Civil War	34.1	48.1	13.4	3.9	0.0	0.6	337

	Doct	Comp	LibA	CommC	Trade	Spec1	N
U.S. Hist: Topics Since Civil War	45.7	39.7	10.1	4.0	0.0	0.5	199
U.S. Cult, Intell History	42.5	35.5	13.2	4.8	0.4	3.5	228
Hist of Indiv. States, Regions	29.1	42.0	8.3	19.6	0.0	1.0	578
Afro-American History	21.5	45.3	7.0	25.0	0.4	0.8	256
U.S. Hist: Other	33.4	45.5	13.0	3.6	0.5	4.1	440
Euro Hist: Dark & Middle Ages	36.8	41.4	18.6	2.7	0.0	0.5	220
Euro Hist: Ren. to 1789	35.0	43.1	15.5	4.3	0.2	1.9	420
Euro Hist since 1789	34.8	39.2	13.2	7.3	0.5	4.9	589
Hist of Individ Euro Countries	37.9	40.5	14.6	6.0	0.5	0.5	417
Euro Hist: Other	34.7	37.4	14.8	8.2	0.3	4.6	366
Asian History	39.5	35.2	13.3	10.2	0.4	1.6	256
African History	35.6	35.6	14.4	13.5	0.0	1.0	104
Latin American History	42.5	39.5	8.5	9.5	0.0	0.0	200
Hist of Other World Regions	40.3	43.4	5.4	5.4	0.0	5.4	129
History: Other, Unknown	36.3	27.3	9.9	13.8	0.6	12.1	842

Doct	Comp	LibA	CommC	Trade	Spec1	N
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POLITICAL SCIENCE

International Re- Lations	42.9	33.9	8.9	6.0	0.0	8.3	531
Polit. Sci.: Introduction	31.9	36.8	6.5	23.3	0.4	1.2	1048
U.S. Govt & Poli- tics	24.9	38.8	5.6	28.7	0.2	1.8	4104
U.S. Constit.Law/ History/Politics	37.3	36.0	9.0	11.6	0.2	6.0	622
Polit. Theory/ Philos, Ideology	43.1	40.1	12.5	2.3	0.0	1.9	471
Comparative Govt	38.1	36.0	9.1	9.8	0.4	6.6	286
European Govt & Politics	43.2	45.9	9.6	0.7	0.0	0.7	146
Non-West. Govt & Politics	58.8	32.4	5.9	0.6	0.0	2.4	170
Methodology, Res. Design	49.0	39.8	5.1	1.0	0.0	5.1	98
Polit. Behavior/ Elections,Voters	45.6	40.4	10.3	1.5	0.4	1.8	272
U.S. State, Local Gov't & Politics	24.	40.1	7.3	27.2	0.0	0.8	658
U.S. Foreign Pol- icy, Diplomacy	44.3	35.4	15.5	0.9	0.0	4.0	226
Pol Sci: Other Determinable Top	47.5	34.5	7.9	6.5	0.0	3.6	139
Pol Sci: Indeterm Missing	42.1	28.5	8.9	16.9	1.0	2.7	302

	Doct	Comp	LibA	CommC	Trade	Spec1	N
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SOCIOLOGY

Sociology: Intro, Principles	22.3	36.9	6.2	31.4	1.3	1.9	5238
Social Instits: Family, Marriage	23.1	42.2	10.3	22.6	0.6	1.2	1209
Soc of Race, Minority Groups	26.9	47.8	8.8	15.3	0.0	1.1	464
Organizat. Sociology	39.7	44.9	9.6	5.1	0.0	0.6	156
Soc of Aging, Health, Youth, etc	32.4	53.4	5.7	5.7	1.2	1.6	247
Social Change, Collect. Behav.	46.4	38.4	8.4	5.9	0.4	0.4	237
Social Theory	25.7	57.9	13.8	1.2	0.0	1.5	261
Comparative Soc, 3rd World Soc.	61.7	23.4	4.3	6.4	0.0	4.3	47
Soc Problems, Deviance, Disorg.	25.9	41.7	7.0	24.0	0.4	1.0	1392
Sociolog Research Methods	31.1	55.4	11.0	1.9	0.0	0.6	318
Community/Rural/Urban Sociology	29.4	47.6	9.5	12.5	0.0	1.0	296
Social Stratif., Inequality, Povty	44.4	37.9	11.8	4.6	0.7	0.7	153
Small Groups, Socialization	31.6	48.9	10.5	6.0	0.0	3.0	133
Applied Sociology Internships	22.8	42.1	26.3	8.8	0.0	0.0	57
Sociology:Missing	34.9	38.9	7.1	16.5	2.1	0.6	777

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Urban Studies	49.1	38.7	7.3	2.8	0.0	2.0	493
Social Statistics	42.2	47.9	5.0	3.3	0.0	1.7	121
Social Sci.: Oth, Indeterminable	40.1	38.6	6.4	10.2	2.3	2.3	344

CONSTRUCTION TRADES

Brickmasonry, Stonemasonry	9.5	4.8	0.0	81.0	4.8	0.0	21
Carpentry	7.7	4.8	0.0	73.1	14.4	0.0	104
Electric & Power Installation	5.0	20.0	0.0	52.5	12.5	10.0	40
Electrician	3.5	3.5	0.0	44.1	49.0	0.0	143
Building & Prop- erty Maintenance	33.3	0.0	0.0	52.4	9.5	4.8	21
Misc. Construc- tion Trades	1.3	10.4	0.0	63.6	24.7	0.0	77
Plumbing, Pipe- fitting, Steamfit	4.4	0.0	0.0	87.0	8.7	0.0	23
Plumbing	6.9	3.5	0.0	69.0	20.7	0.0	29

MECHANICS AND REPAIRERS

Elec/Electronic Equip Repair: Gen	2.1	6.3	0.0	29.9	27.1	34.7	144
Communication Electron Repair	0.7	1.4	0.0	36.4	52.5	9.1	143
Computer Electron Repair	0.0	6.5	0.0	48.4	45.2	0.0	31

	Doct	Comp	LibA	CommC	Trade	Spec1	N
Industrial Elec- tronics	1.5	17.7	0.0	61.8	19.1	0.0	68
Heating, AC & Re- frigerat: General	1.5	1.5	0.0	72.5	24.6	0.0	69
Cooling & Refrig	0.0	0.0	0.0	55.4	39.2	5.4	74
Heating & Air Conditioning	1.8	5.5	0.0	58.2	34.6	0.0	55
Heating, AC & Refriger: Other	0.0	0.0	0.0	55.6	44.4	0.0	18
Industrial Equip Maint & Repair	5.9	2.9	0.0	64.7	23.5	2.9	34
Electromech, Hy- draul Inst Rep.	3.0	9.1	0.0	84.9	0.0	3.0	33
Misc. Mechanics & Repairers: Oth	37.5	25.0	0.0	18.8	12.5	6.3	16
Stationary Energy Sources	5.3	21.1	0.0	52.6	15.8	5.3	19
Vehicle/Mob Equip Mechanics: Gen.	0.0	30.8	0.0	53.9	15.4	0.0	26
Aircraft Mechan, Frame, Powerplant	7.4	4.9	0.0	66.4	16.4	4.9	122
Auto Body Repair	0.0	3.1	0.5	41.3	54.3	0.9	223
Automotive Mech- anics	0.8	4.2	0.5	61.9	30.5	2.0	738
Diesel Engine Mechanics	0.0	1.9	0.0	84.5	11.0	2.6	155
Small Engine Repair	0.0	3.1	0.0	31.3	65.6	0.0	32
Vehicle etc. Me- chanics: Other	0.0	5.7	0.0	68.2	26.1	0.0	88
Mechanics & Re- pairers: Other	0.0	11.8	0.0	82.4	5.9	0.0	17

	Doct	Comp	LibA	CommC	Trade	Spec1	N
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PRECISION PRODUCTION

Drafting: Gen, Technical Draft.	6.4	15.0	0.3	65.3	12.7	0.3	346
Architectural Draft/Draw/Rendr	14.0	12.3	0.7	63.0	6.9	3.1	292
Civil/Structural Drafting	7.8	17.2	4.7	62.5	1.6	6.3	64
Electrical/Elec- tronics Drafting	2.4	9.8	0.0	61.0	14.6	12.2	82
Mechanical Draft	9.5	24.5	0.0	57.1	4.1	4.8	147
Drafting: Other	2.1	6.4	0.0	78.7	12.8	0.0	47
Graphic & Print. Communic.: Gen.	24.6	47.8	0.7	16.7	5.1	5.1	138
Commercial Art	9.9	15.1	2.4	61.8	9.0	1.9	212
Commercial Photog	18.6	23.0	0.9	23.9	10.6	23.0	113
Typesetting, Com- position, Typog.	20.5	24.1	1.2	31.3	18.1	4.8	83
Lithography, Platemaking	14.4	42.3	1.0	27.8	3.1	11.3	97
Photographic Lab & Darkroom	3.2	38.7	0.0	32.3	25.8	0.0	31
Printing Press Operations	6.5	41.9	0.0	29.0	22.6	0.0	31
Silk Screen Mak- ing & Printing	20.3	29.7	6.3	32.8	1.6	9.4	64
Graphic & Print- ing Comm: Other	12.1	37.9	1.5	27.3	16.7	4.6	66

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Leatherworking & Upholstery	16.7	38.9	0.0	44.4	0.0	0.0	18
Meatcutting	17.4	8.7	0.0	56.5	4.4	13.0	23
Precision Metal Work: General	14.7	30.9	0.0	45.6	4.4	4.4	68
Machine Tool/Machine Shop	3.9	8.5	0.0	74.1	11.6	1.9	259
Metal Fabrication	18.2	36.4	0.0	36.4	4.6	4.6	22
Sheet Metal	3.3	8.3	0.0	80.0	8.3	0.0	60
Tool & Die Making	3.0	21.2	0.0	72.7	3.0	0.0	33
Welding	1.7	6.1	2.1	65.3	24.1	0.7	424
Jewelry Design/Fabric/Repair	5.7	28.6	0.0	25.7	0.0	40.0	35
Precision Work: Assorted Maters.	7.1	50.0	0.0	42.9	0.0	0.0	14
Woodworking: Gen.	32.1	55.4	0.0	9.8	2.7	0.0	112
Furniture Making	25.0	41.7	0.0	33.3	0.0	0.0	24
Millwork/Cabinet-Making	13.6	18.2	0.0	31.8	36.4	0.0	22
Woodworking: Oth	21.4	71.4	0.0	3.6	3.6	0.0	28

TRANSPORTATION

Air Transport: Gen Fund. Aviation	20.0	20.0	4.4	37.8	6.7	11.1	45
Airplane Piloting & Navigation	15.0	14.3	0.0	39.5	0.8	30.5	266

	Doct	Comp	LibA	CommC	Trade	SpecI	N
Aviation Mangement/ Iaws/Regs/Safety	21.4	21.4	0.0	26.2	4.8	26.2	42
Air Traffic Con- trol	25.0	18.8	0.0	50.0	0.0	6.3	16
Flight Attendants	0.0	20.0	0.0	73.3	0.0	6.7	15
Air Transport: Other	0.0	28.6	0.0	64.3	0.0	7.1	14
Vehicle & Equip. Operation: All	8.7	17.4	0.0	34.8	39.1	0.0	23
Deep Water Diving	3.3	16.7	0.0	36.7	0.0	43.3	30
Sailors & Deck- hands	0.0	4.0	0.0	12.0	76.0	8.0	25
Water Transport: Other	5.9	0.0	0.0	29.4	0.0	64.7	17
Transportation: Other, Indeterm.	52.6	5.3	0.0	36.8	5.3	0.0	19

VISUAL AND PERFORMING ARTS

Visual & Perform. Arts: Gen, Survey	24.6	34.5	17.4	22.2	0.0	1.4	293
Visual Communica- tions/Analysis	39.8	24.4	8.1	17.1	4.9	5.7	123
Crafts: General	11.5	49.7	10.2	28.7	0.0	0.0	157
Ceramics	20.3	39.2	8.6	29.8	1.0	1.2	607
Fiber/Textiles/ Weaving	23.0	28.2	5.2	21.5	1.5	20.7	135
Glass	22.2	40.7	14.8	18.5	0.0	3.7	27

	Doct	Comp	LibA	CommC	Trade	SpecI	<u>N</u>
Metal, Jewelry	28.5	40.0	2.3	25.4	0.0	3.9	130
Crafts: Other	22.0	46.3	7.3	14.6	2.4	7.3	41
Dance, Choreogr., Labanotation	39.6	40.1	4.8	15.0	0.2	0.3	1961
History of Dance	68.0	32.0	0.0	0.0	0.0	0.0	25
Design: Gen, 2D, 3D	30.1	35.4	6.5	22.0	2.3	3.8	934
Graphic Design/ Arts/Lettering	28.3	31.9	4.7	20.6	4.4	10.0	360
Illustration De- sign	37.6	12.9	2.0	25.7	9.9	11.9	101
Industrial Design Packaging	21.2	63.6	0.0	10.6	4.6	0.0	66
Theater Design, Stagecraft	31.3	37.6	9.2	21.0	0.7	0.2	415
Design: Other	28.1	33.8	3.8	20.6	6.3	7.5	160
Dram. Arts, Act- ing, Directing	36.5	33.4	12.6	16.7	0.1	0.7	1637
Hist of Theatre, Drama Criticism	31.9	43.2	11.2	13.3	0.0	0.4	686
Film Arts: Gen.	40.8	37.8	2.0	17.4	0.0	2.0	392
Cinematography/ Film-Making/Prod	31.7	39.0	5.9	15.6	0.0	7.8	205
Photography	21.4	29.7	4.2	34.2	3.6	6.9	929
Video	50.0	25.0	6.3	0.0	0.0	18.8	16

	Doct	Comp	LibA	CommC	Trade	Spec1	<u>N</u>
Hist of Film, Theory, Criticism	39.5	43.0	7.4	7.4	1.2	1.6	256
Film Arts: Other	37.8	26.7	2.2	11.1	0.0	22.2	45

FINE ARTS

Fine Arts: Gen, Theory, Studio	26.5	46.3	8.0	16.1	0.3	2.8	1289
Art History & Appreciation	27.7	39.4	9.5	20.3	1.6	1.5	2861
Arts Management	57.9	10.5	5.3	21.1	0.0	5.3	19
Drawing	24.8	31.9	7.1	26.5	3.9	5.9	1531
Intermedia	12.1	57.6	9.1	15.2	0.0	6.1	33
Painting	26.8	38.2	6.9	19.6	4.4	4.1	728
Sculpture	25.5	37.2	10.2	16.9	0.9	9.2	325
Printmaking, Intaglio	25.6	40.6	12.0	18.1	1.5	2.3	133
Color, Color Theory	18.2	42.1	5.7	18.2	5.7	10.2	88
Non-Western Art: History & Apprec	40.6	19.8	19.8	12.9	2.0	5.0	101
History of Archi- tecture	69.0	12.6	3.7	10.0	1.6	3.2	190
Fine Arts: Other	29.6	43.9	10.1	11.9	1.3	3.3	396

Doct	Comp	LibA	CommC	Trade	Spec1	N
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MUSIC

Music: Ear Train, Dictation, Solfeg	25.6	45.1	6.9	17.9	0.3	4.2	1462
Music Hist & Apprec: General	21.8	44.5	9.1	22.1	0.4	2.0	1691
Music Performance Applied Music	22.6	46.8	11.3	14.6	0.5	4.2	10078
Music Theory	27.3	45.3	9.1	13.3	0.3	4.8	1741
Music Literature	28.9	48.2	8.7	12.8	0.3	1.1	367
Music History: Classical	40.0	36.8	15.5	2.3	0.7	4.8	310
Music Hist: Opera & Musical Theatr	64.3	26.2	4.8	4.8	0.0	0.0	42
Music History: Jazz	42.1	40.0	2.1	13.6	0.0	2.1	140
Music History: Pop, Rock, Folk	26.0	38.4	8.2	24.7	0.0	2.7	73
Music Hist: Afro- American Music	39.5	44.2	11.6	4.7	0.0	0.0	43
Non-Western Music	46.2	23.1	11.5	19.2	0.0	0.0	26
Music: Other, In- determinable	27.5	48.1	9.9	6.8	0.0	7.8	426
Visual & Perform. Arts: Other, Miss	40.0	40.0	11.1	4.4	0.0	4.4	45

OTHER

Cooperative Educ	20.4	17.5	4.4	56.3	1.5	0.0	206
Readings, Indepen Study: Fld Unspc	43.1	38.1	9.2	7.3	1.4	0.9	218

	Doct	Comp	LibA	Comm C	Trade	Spec1	<u>N</u>
College/Freshman Orientation	5.3	35.7	2.6	53.4	2.0	1.1	852
Senior Seminars, Theses: Fld Unsp	53.2	32.3	11.3	1.6	1.6	0.0	62
Unclassifiable Titles	28.1	32.6	11.9	21.2	2.7	3.5	877
Missing	25.0	32.5	9.8	23.3	4.5	4.8	2521

A PREVIEW OF COMING ATTRACTIONS

The tables on the following pages are intended to introduce the reader to the students in the NLS/72 and its Postsecondary Transcript Sample (PETS), and to provide a small sample of the data from the records these students generated over a 14-year period. These data will be explored in detail in Archives of a Generation, containing studies on such topics as community college students, cultural literacy in the college curriculum, the careers of varsity athletes, and women's educational attainment and labor market experience.

There are some unusual revelations in the data on the following pages that should be underscored, and some conventional wisdoms that are reinforced in very powerful ways. For example:

- o The amount of math, science, and foreign language one studies in high school seems directly proportional to degree attainment; the amount of trade and business courses one takes in high school seems inversely proportional to degree attainment; and the amount of fine and performing arts studied in high school seems to have nothing to do with degree attainment. Conclusion: if you prepare for college, the chances are higher that you will go and succeed; if you don't, you won't. While not shown in the table on p. 229, this conclusion holds by race and sex. What we will indicate in Archives of a Generation is how these course-taking patterns carry through college and into the workplace.
- o Students attend more institutions than we think they do: 45% of all students who earned more than 10-credits (hence were "non-incidental") attended more than one institution over a 12-year period. Not all of these students "transferred" in the sense of completing a substantial amount of work at one institution, then attending a second (or third) institution at which they completed a substantial amount of work. Many of them simply took a course or two or three at another institution as incidental students. To be sure, the higher the degree attainment, the more likely a student would have attended more than one institution.
- o The difference in degree attainment between students who come from households in which English is not the first language and those who come from wholly English-speaking households is negligible.
- o The vast majority of students in this generation entered postsecondary education directly from high school. The length of delay in entry is inversely related to degree

attainment. The 12-year time frame for the NLS/PETS strengthens this conclusion.

- o Low SES students and black students, in particular, received disproportionately high shares of the scholarships awarded to this generation. For the NLS/72 cohort, at least, the financial aid system worked in terms of its principal purpose.
- o Blacks are no more likely than whites to attend community colleges before they are 31 years old. For some strange reason, a mythology persists that a majority of black students attend community college. That was not true for this generation, and, in Archives of a Generation, we'll explain why.
- o Seven out of eight students who earned a Bachelor's degree within 12 years of high school graduation did it within 6.5 years. The speed with which one earns the degree seems directly related to gender (women earn the degree faster than do men), scholarship support in the first two years after high school graduation, highest degree eventually earned, and type of institution awarding the degree (Liberal Arts colleges do it faster).
- o Black and (in particular) Hispanic students who earn the Bachelor's degree are more likely to continue on to graduate or professional school than are white BAs. The comparatively low graduate school enrollment shares of these minority groups, on the other hand, are a consequence of their low rates of BA completion.
- o A much higher proportion (42%) of Bachelor's degree students take at least one admissions test to graduate/professional school than public discussions admit.
- o From high school through graduate school there is a men's curriculum and a women's curriculum. In Archives of a Generation, we will describe these curricula in more detail, and indicate their relationships to educational attainment, academic achievement, and careers.

So much for a very limited sample of conclusions. They but scratch the surface of this archive.

A word of explanation is necessary for some of the key variables and abbreviations used in the tables that follow:

SES This is a trichotomized variable, based on quartiles of socioeconomic status. The "Medium" SES category includes the 25th-74th percentiles. SES is a

construct that includes family income, parental occupation, and level of parental education.

SAT We converted ACT to SAT scores, then arrayed all scores in 35 bands.

Delay The dates were dependent on transcripts received and on the quality of the dates actually recorded on the transcripts. In some cases, not all transcripts for a given student were received; in others, the dates were missing and could not be imputed from other information on the transcript.

Incid. An "incidental" student is one who earned 10 or fewer credits in either a particular kind of institution or in his/her entire postsecondary experience through age 30.

Non-Eng. Speak. The question in the Base Year (1972) survey was, "Is English the language spoken most often in your home?" The answer (yes/no) does not necessarily describe the student's first language.

U-G Cred Total credits earned prior to the date of the Bachelor's degree. These data are slightly understated due to uncorrectable irregularities (missing term dates, grades, and credit information) on some transcripts.

A few of the tables on the following pages include standard errors. Ideally, all of them should, but our space was limited. Standard errors of measurement allow a reader to judge whether any comparison he/she wishes to make within a table is statistically significant. The procedure is simple, and requires no more than an ordinary calculator and elementary algebra. Take the two statistics you wish to compare. Subtract the smaller from the larger. Use the result as the numerator in your equation. Then look at the two standard errors for those statistics. Square each one of them. Add the squares. Take the square root of that sum, and use it as the denominator in your equation. Divide the denominator into the numerator. If the result is 2.0 or more, you have a statistically significant difference. That's a crude way of putting it, but it will do for most of us.

**BASIC DEMOGRAPHY AND HIGH SCHOOL BACKGROUNDS
of NLS/72 AND NLS/PETS STUDENTS**

NOTE: Six analytical universes are presented, covering combinations and sub-sets of groups from the Base Year (1972) through the 5th Follow-Up (FU5) of 1986.

	<u>ALL NLS/72* (22,652)</u>	<u>NO PETS** (10,053)</u>	<u>All PETS (12,599)</u>	<u>All PETS >10 Crds (10,734)</u>	<u>All PETS BA Degs. (4,927)</u>	<u>PETS IN FU5/1986 (8,205)</u>
Male	49.9%	47.4%	51.0%	51.1%	53.0%	50.8%
Female	50.1	52.6	49.0	48.9	47.0	49.2
White	86.4	83.2	87.6	88.5	92.7	88.1
Black	9.3	11.3	8.8	8.1	5.6	8.8
Hispanic	4.3	5.5	3.6	3.4	1.8	3.1
High SES	34.0	27.9	35.7	38.5	41.1	36.9
Med. SES	48.9	53.4	48.3	45.8	48.8	47.4
Low SES	17.2	18.7	15.9	15.7	10.1	15.7
Non-English Speaking Household	7.0	6.7	7.1	7.0	6.7	6.0
SAT <700	16.4	32.4	13.8	12.8	7.3	12.4
SAT >1148	13.7	5.6	15.3	15.9	22.0	14.8
HS RANK <25%	20.1	31.4	12.3	9.6	3.7	10.7
HS RANK >79%	22.1	9.7	30.8	33.9	47.9	31.8
<u>HS Curriculum</u>						
>4 sems Math	29.2	16.3	38.5	41.4	52.2	39.6
>4 sems Sci	21.6	11.3	28.4	30.9	39.8	29.4
>4 sems ForL	11.3	4.6	15.9	17.5	24.1	16.3
>2 sems Trad	14.5	19.5	10.8	9.6	5.8	10.2
>2 sems Busi	26.3	32.4	22.5	20.8	14.5	22.0
>2 sems Arts	24.1	20.8	26.8	27.2	28.2	26.3
<u># of Postsec. Institutions</u>						
Attended: 1	N.A.	N.A.	61.1	55.5	41.9	58.0
2	N.A.	N.A.	28.7	32.6	40.4	30.5
3+	N.A.	N.A.	10.2	11.9	17.7	11.5

* 9,197 took the SAT or ACT; 19,838 had H.S. class ranks computed.

** 18% of these people claimed to have attended some kind of post-secondary institution by the fall of 1979, but we were unable to obtain a validating transcript, hence they are not included in PETS.

Source: NLS/72: Special Analysis File.

HIGHEST DEGREE EARNED BY NLS/PETS STUDENTS, 1972-1984

Universe: All students who earned more than 10 postsecondary credits, i.e. nonincidental students. N=10,734.
All rows add to 100.0%.

	<u>None</u>	<u>Licen/ Certif</u>	<u>Assoc</u>	<u>Bach</u>	<u>Bach+ Some Grad</u>	<u>Mast</u>	<u>1st Prof/ Doct</u>
All	39.1%	4.3%	10.2%	33.7%	4.0%	6.3%	2.4%
Men	39.9	3.0	9.0	34.1	4.0	6.1	3.7
Women	38.4	5.8	11.4	33.1	3.9	6.5	0.9
White	36.9	4.3	10.4	35.3	4.2	6.6	2.4
Black	55.3	4.5	7.5	24.6	1.5	4.7	2.0
Hispanic	59.8	4.7	11.6	14.6	5.1	2.9	1.4
High SES	30.9	2.0	6.9	42.7	5.1	8.5	3.9
Med. SES	41.8	5.2	12.3	30.3	3.5	5.3	1.5
Low SES	50.9	7.5	11.7	22.0	2.7	4.0	1.2
English 2nd Lang.	51.5	3.9	7.5	27.4	3.3	4.5	2.0
English 1st	47.2	4.6	8.7	28.7	3.4	5.4	2.0

By Months of Delay after HS:

0-6 (77.5%)	34.2	3.5	9.9	37.9	4.7	7.1	2.7
7-15 (8.7%)	50.6	6.0	10.6	25.0	3.0	3.9	0.8
16-27 (4.2%)	52.5	7.2	12.4	21.7	1.7	3.4	1.1
28-51 (5.2%)	56.0	8.6	11.2	18.0	0.8	3.6	1.8
52+ (4.6%)	69.4	6.7	11.9	8.2	0.2	3.3	0.4

By H.S. Class Rank:

90-100 %tile	19.9	2.0	5.1	45.9	6.8	13.6	6.6
80-89 %tile	29.8	3.2	8.8	41.7	5.7	7.8	3.0
65-79 %tile	35.0	4.3	10.1	37.4	3.9	7.4	2.0
50-64 %tile	43.8	3.8	12.2	32.4	3.2	3.5	1.1
25-49 %tile	50.9	6.4	12.7	24.4	2.4	2.7	0.6
1-24 %tile	62.3	6.9	12.8	15.1	1.0	1.5	0.4

By SAT Score:

1303+	12.3	0.4	0.5	51.5	3.5	17.3	14.6
1149-1302	19.6	0.6	2.5	48.2	7.6	12.6	9.0
976-1148	22.9	1.3	6.0	49.5	6.2	10.6	3.6
834-975	34.9	2.8	9.8	40.2	3.8	6.8	1.7
701-833	41.9	3.6	12.5	33.8	3.4	4.4	0.5
571-700	48.9	4.8	13.4	26.0	3.1	3.9	0.1
400-570	53.6	4.3	10.5	23.7	4.9	2.9	---

Source: NLS/72: Special Analysis File

**POSTSECONDARY SCHOLARSHIP SUPPORT TO
THE HIGH SCHOOL CLASS OF 1972**

Universe: All students with any completed nontransfer courses, 1972-1984. N=12,332. Standard errors are in parentheses.

	Scholarship at any time, <u>1972-1974</u>	Scholarship at any time, <u>1975-1979 Only</u>	Never Received Scholarship
All	27.9% (.228)	16.4% (.159)	55.7% (.222)
Men	26.6 (.273)	18.0 (.206)	55.4 (.277)
Women	29.3 (.299)	14.8 (.200)	55.9 (.295)
White	26.4 (.230)	15.7 (.174)	57.9 (.230)
Black	39.6 (.639)	24.1 (.450)	36.3 (.598)
Hispanic	35.8 (.901)	16.5 (.478)	47.7 (.689)
High SES	23.0 (.289)	15.8 (.193)	61.2 (.332)
Med. SES	28.6 (.322)	15.8 (.229)	55.6 (.291)
Low SES	37.2 (.497)	18.6 (.316)	44.2 (.508)

By Highest Degree:

None	19.1 (.268)	14.7 (.179)	66.2 (.238)
Certif/License	14.3 (.714)	18.1 (1.10)	67.6 (1.12)
Associate's	26.2 (.665)	16.3 (.330)	57.5 (.696)
Bachelor's	37.9 (.330)	17.7 (.306)	44.4 (.356)
Graduate	49.3 (.786)	20.7 (.459)	30.0 (.818)

Source: NLS/72: Special Analysis File

BASIC DEMOGRAPHY OF 2/4-YEAR and TRANSFER ATTENDANCE PATTERNS

Universe: All NLS/PETS students whose records show any completed non-transfer courses (N=12,332). Standard errors in parentheses.

Note: All columns add to 100.0%

	<u>White</u>	<u>Black</u>	<u>Hisp.</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
Classic Transfer:						
AA, then BA	3.6% (.075)	1.1% (.100)	2.9% (.171)	3.8% (.104)	2.9% (.080)	3.4% (.067)
Transfer: BA/no AA	3.4 (.071)	2.7 (.176)	2.1 (.447)	3.7 (.113)	2.8 (.069)	3.3 (.071)
Transfer: AA/no BA	1.8 (.065)	0.9 (.035)	1.3 (.058)	1.7 (.072)	1.7 (.087)	1.7 (.058)
Terminal AA, w/ Incidental 4-yr	5.9 (.106)	3.7 (.180)	6.7 (.436)	5.1 (.112)	6.4 (.145)	5.7 (.099)
No Degree: Non- Incid. 2 & 4 yr	2.5 (.049)	3.0 (.228)	5.0 (.414)	2.8 (.074)	2.5 (.079)	2.7 (.050)
No Degree: Non- Incid. 2 yr only	14.9 (.215)	18.3 (.688)	26.9 (.859)	15.8 (.192)	15.5 (.348)	15.6 (.217)
No Degree: Inci- dental 2 year	7.1 (.105)	10.8 (.281)	12.7 (.287)	7.3 (.124)	7.9 (.163)	7.6 (.098)
No 2-Year, but 4-year	50.2 (.351)	47.8 (.714)	30.8 (1.027)	50.7 (.356)	47.9 (.432)	49.3 (.331)
No 2-Year, no 4-year	6.5 (.149)	8.5 (.394)	8.0 (.384)	5.6 (.169)	7.8 (.196)	6.7 (.138)
Other Patterns*	4.2 (.069)	3.1 (.148)	3.6 (.498)	3.6 (.077)	2.9 (.075)	4.1 (.065)

*Two-thirds of these cases involve Associate's degrees awarded by institutions other than community colleges, principally by 4-year colleges.

Source: Clifford Adelman, Using Transcripts to Validate Institutional Mission. Washington, D.C.: Office of Research, U.S. Department of Education, 1990. OR Working Paper #90-523.

**DATE OF BACHELOR'S DEGREE:
High School Class of 1972**

Universe: All NLS/PETS students for whom an undergraduate transcript indicating a Bachelor degree was received. N=4,927. Note: All rows add to 100.0%.

	<u><1976</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981- 1984</u>
All	4.8%	55.2%	19.9%	7.8%	4.1%	3.3%	5.0%
Men (53.0%)	3.8	50.9	22.7	9.6	4.5	3.7	5.5
Women (47.0%)	6.7	60.1	16.7	5.7	3.7	2.8	4.4
White (92.7%)	4.7	56.1	19.8	7.5	3.9	3.1	4.9
Black (5.6%)	5.6	48.7	21.2	8.7	5.2	3.8	6.7
Hispan (1.8%)	3.8	32.6	17.5	16.0	11.8	12.2	5.6
High SES (41.1%)	5.6	57.4	20.2	7.6	2.9	2.2	3.9
Med SES (48.8%)	3.8	54.6	19.7	7.5	4.8	3.8	5.7
Low SES (10.1%)	4.7	48.0	18.2	9.0	6.9	6.3	6.9

By Months Delay in Entry to PSE:

0-6 (88.4%)	5.2	59.3	19.5	6.9	3.3	2.3	3.5
7-18 (6.1%)	2.1	30.0	32.7	16.0	6.6	5.2	7.3
19-30 (2.5%)	3.5	38.5	14.2	15.4	7.5	9.1	11.9
31-54 (2.3%)	---	2.6	12.7	12.6	23.2	24.7	24.3
55+ (0.8%)	---	---	---	2.5	8.1	15.0	74.4

By 2-Year Coll. Attendance:

Tran w/AA (8.5%)	1.9	36.0	23.5	16.0	8.1	6.7	7.9
Tran no AA (8.2%)	2.6	34.7	26.6	13.3	7.6	6.2	9.1
No 2-Year (76.3%)	5.3	59.6	18.8	6.4	3.4	2.4	4.2
Oth Pattrn (7.0%)	5.4	57.6	18.1	6.9	3.2	3.6	5.1

By Highest Degree

BA (74.0%)	3.4	51.6	21.1	8.7	4.7	4.1	6.3
BA+ (8.7%)	8.1	59.1	20.2	7.1	3.3	0.7	1.5
Master (12.8%)	8.9	67.2	15.3	4.2	2.3	1.0	1.2
Doct (4.5%)	9.4	73.8	11.4	4.0	1.0	0.2	0.2

By Type Instit. Awarding BA

Doctoral (38.9%)	4.9	54.2	21.6	8.2	3.6	2.8	4.6
Compreh. (48.0%)	5.0	54.9	19.1	7.5	4.3	3.7	5.5
Lib.Arts (10.0%)	3.2	66.1	15.3	5.6	4.4	1.8	3.6
Special (2.9%)	3.1	37.3	23.4	14.5	8.0	7.2	6.5

Source: NLS/72: Special Analysis File.

**DATE OF ASSOCIATE'S DEGREE:
High School Class of 1972**

Universe: All students for whom the Associate's degree was the highest degree earned. N=1,055. Note: All rows add to 100.0%

	<u>1972- 1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979- 1980</u>	<u>1981- 1984</u>
All	38.4%	19.7%	10.7%	5.9%	5.9%	9.6%	9.9%
Men (45.4%)	34.6	20.6	13.7	5.1	5.9	11.0	9.0
Women (54.6%)	41.5	18.9	8.1	6.5	5.8	8.3	10.7
White (90.2%)	40.0	19.0	10.8	6.2	5.1	9.2	9.8
Black (5.9%)	21.4	28.0	7.5	1.1	14.3	13.1	14.6
Hispan (3.9%)	28.4	23.4	13.2	5.8	11.3	12.4	5.4
High SES (25.6%)	30.1	22.5	11.8	8.1	5.5	10.0	12.0
Med. SES (55.4%)	44.0	17.7	10.6	5.3	4.5	8.0	9.9
Low SES (18.0%)	34.0	21.9	9.2	4.8	10.3	13.0	7.0

**By Months Delay
in Entry to PSE:**

0-6 (75.6%)	49.3	20.6	10.2	5.2	3.8	5.6	5.4
7-18 (9.0%)	11.0	39.5	14.0	7.5	4.7	17.0	6.4
19-30 (5.2%)	5.2	11.2	32.5	9.5	11.7	15.0	15.0
31-54 (5.7%)	---	---	0.9	13.3	29.6	28.8	27.5
55+ (4.9%)	---	---	---	1.5	7.2	29.1	62.3

**By 2-Yr College
Attendance:**

Transf no BA (19.1%)	34.9	16.7	16.9	5.2	9.7	11.0	5.7
AA+Incid 4-Yr (64.8%)	37.5	21.2	9.4	5.6	4.9	10.0	11.3
No 2-Year* (10.7%)	43.6	19.5	7.7	9.8	4.4	5.6	9.4
Sp.School (3.6%)	61.4	10.8	11.8	5.3	2.6	1.7	6.4
Other Pattern (1.9%)	33.0	15.6	6.5	---	14.7	15.6	14.7

Scholarship: '72-74

Yes (26.2%)	51.7	23.9	7.4	1.7	4.4	4.3	6.5
No (73.8%)	35.6	18.8	11.4	6.8	6.2	10.7	10.7

* These students received their Associate's degrees from 4-year institutions.

Source: NLS/72: Special Analysis File.

AFTER THE BACHELOR'S:
Courses of Study and Degrees Earned, by Field

Universe: All NLS/PETS students who earned at least 11 credits after the Bachelor's degree. N=1,365. It is obvious that some of these students are included in more than one of the three universes below.

Note: All columns add to 100.0%

	N=445		N=701		N=255	
	>10 Credits After BA, but No Degree		Master's		Doctorate/ 1st Profess.	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
ALL	51.4%	48.5%	50.3%	49.7%	80.4%	19.6%
Education	14.4	39.4	12.6	37.4	---	3.2%
Business	18.3	8.8	22.6	5.3	0.6%	---
Engineering	5.8	0.9	8.6	0.8	1.7	---
Fine Arts	---	5.1	1.4	0.9	---	---
Psychology	5.0	2.0	2.6	4.4	1.0	3.2
Physical Sci.	4.3	1.8	5.1	2.2	3.7	5.6
Social Sciences	3.8	0.2	5.6	3.6	2.4	3.9
Theology	3.4	---	5.3	2.4	0.4	---
English	1.0	3.4	3.1	5.4	0.8	---
Performing Arts	3.2	1.6	3.3	4.2	---	4.1
Biology	3.0	2.2	3.9	1.1	3.5	2.9
Allied Health	1.1	2.6	3.2	10.9	0.8	---
Journalism, etc.	2.5	2.5	2.4	---	---	---
Computer Sci	1.6	1.7	1.1	1.1	---	---
Architecture	0.7	1.5	1.1	0.6	---	---
Agric/Nat Resour	1.0	0.5	2.5	0.8	0.3	1.1
Law	2.4	0.9	---	---	34.7	39.8
Dentistry	---	0.4	---	---	12.6	9.4
Medicine	---	---	---	---	23.0	23.1
Other Hlth Prof	2.4	---	0.1	---	11.1	3.9
Public Administ.	2.7	0.4	3.5	1.3	---	---
Social Work	---	---	1.1	3.2	---	---
Nursing	0.8	1.5	---	3.4	---	---
Library Science	0.8	0.5	0.1	3.7	---	---
Other Fields	13.2	12.5	10.8	7.3	3.4	---
Indeterminable	8.6	9.6	---	---	---	---

Source: NLS/72: Special Analysis File.

BACHELOR'S DEGREE MAJORS OF THE NLS/PETS STUDENTS

NOTE: All NLS/PETS students whose records include a transcript for a Bachelor's degree. N=4,927.* Note: All columns add to 100.0%.

<u>Major</u>	<u>ALL</u>	<u>MEN</u>	<u>WOMEN</u>	<u>WHITE</u>	<u>BLACK</u>	<u>HISP</u>
Business	16.1%	22.7%	8.7%	16.3%	15.5%	9.9%
Education	16.5	8.5	25.5	16.2	21.9	15.1
Applied Soc. Sci. ¹	8.0	6.3	9.9	7.9	9.7	8.9
Vocational Services ²	1.2	0.9	1.5	1.2	1.4	2.8
-----	-----	-----	-----	-----	-----	-----
Engineering/Comput	5.0	8.9	0.5	5.2	1.7	3.0
Phys Sci/Math	4.2	5.6	2.6	4.2	3.6	6.7
Biological Sciences	6.4	7.8	4.8	6.6	3.8	4.1
Applied Sciences ³	3.3	4.7	1.8	3.4	2.7	4.2
Health Sci/Services	7.7	2.9	13.1	7.7	7.1	6.8
Technical/Trade	1.4	2.4	0.2	1.4	0.6	2.6
-----	-----	-----	-----	-----	-----	-----
Humanities	6.1	4.1	8.2	6.1	5.1	6.2
Arts	4.6	2.9	6.5	4.7	3.0	4.5
Social Sciences	17.5	19.4	15.0	17.1	23.0	24.0
-----	-----	-----	-----	-----	-----	-----
Other	2.2	2.8	1.5	2.2	1.1	1.6

1. Includes Communications, Criminal Justice, Social Work, Home Economics, Public Administration.
2. Includes Business Support Services, Vocational Home Economics, Library Science, Recreation.
3. Includes Agriculture, Natural Resources, Forestry, Architecture, Science Technologies.

* There were 75 students in the NLS/PETS for whom we received a graduate school transcript but no undergraduate transcript. These students are not included here.

Source: NLS/72: Special Analysis File.

**COLLEGE EXPERIENCES/ATTAINMENTS OF
BACHELOR'S DEGREE HOLDERS IN THE NLS/PETS**

By Undergraduate Major

	% of BAs	CHANGED MAJOR	MEAN U-G CRED	MEAN GPA	MEAN TOTAL TIME¹	TOOK GRAD TEST²	% of BAs in FU5³
Engineer/CompSc	5.0%	20.5%	132.4	2.98	5.34	40.2%	4.9%
Phys Sci/Math	4.2	31.5	126.3	3.03	6.29	54.4	4.0
Biological Sci	6.4	28.9	122.0	3.05	6.16	73.7 ⁴	6.5
Applied Sci	3.3	26.2	131.0	2.92	5.81	36.0	3.2
Hlth Sci/Servs.	7.7	21.7	128.0	3.05	5.46	46.5	7.8
Technical/Trade	1.4	17.2	131.6	2.96	5.43	5.0	1.2
-----	-----	-----	-----	-----	-----	-----	-----
Business	16.1	28.0	122.6	2.83	5.13	34.8	17.0
Education	16.5	22.7	120.4	3.02	6.19	36.0	16.4
Appld. Soc. Sci.	8.0	35.8	118.9	2.92	5.21	33.6	7.6
Vocat. Service	1.2	42.8	123.3	2.94	5.38	36.8	1.1
-----	-----	-----	-----	-----	-----	-----	-----
Humanities	6.1	33.7	117.2	3.13	5.96	55.7	5.3
Arts	4.6	26.3	121.4	3.10	5.55	22.1	5.0
Social Sci	17.5	34.1	117.8	3.00	5.59	46.6	17.8
-----	-----	-----	-----	-----	-----	-----	-----
Other	2.2	27.5	120.1	3.05	6.13	53.2	2.2
-----	-----	-----	-----	-----	-----	-----	-----
ALL	----	28.4	122.1	2.99	5.66	42.1	---

NOTES:

1. Total time spent in postsecondary education between the ages of 18 and 30.
2. In the 5th (1986) Follow-Up, indicated that they had taken at least one admissions test for graduate/professional school.
3. Not all of the BAs in the NLS/PETS sample participated in the 5th (1986) follow-up survey.
4. Obviously, a significant proportion of this group consisted of pre-meds who took the MCAT.

Source: NLS/72: Special Analysis File.

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