

the condition of education 2004



INDICATOR 30

Top 30 Postsecondary Courses

The indicator and corresponding tables are taken directly from *The Condition of Education 2004*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2004* visit the NCES web site (<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004077>) or contact ED PUBs at 1-877-4ED-PUBS.

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Programs and Courses

Top 30 Postsecondary Courses

The college courses in which students earned the most credits have remained relatively stable over the past three decades.

The list of the top 30 postsecondary courses—also referred to by Adelman (forthcoming) as the “empirical core curriculum”—reports the subjects that students study the most in college, as opposed to reporting what they “should” study, which might be expressed through graduation requirements or faculty surveys. Using the undergraduate transcripts of students from three high school cohorts who later completed bachelor’s degrees, Adelman identified the 30 courses in which students earned the most credits and examined the extent to which course-taking varied among the three groups.¹ Among bachelor’s degree recipients who graduated from high school in 1972, 1982, and 1992, each cohort earned about one-third of their credits from the top 30 postsecondary courses for the cohort (see supplemental table 30-1).

The empirical core curriculum has remained largely stable over the past three decades: 21 courses appeared in the top 30 for each cohort. Six courses each from the humanities and languages, science and mathematics, and social sciences and business were in the top 30 for all three cohorts, as were music performance, physical

education activities, and student teaching. There were some changes over time however. For example, the number of business courses in the top 30 list increased from four for the 1972 cohort to six for the 1982 cohort and then decreased again to four courses for the 1992 cohort.

The empirical core curriculum varied for graduates of “highly selective,” “selective,” and “nonselective” institutions. For the cohort of bachelor’s degree recipients who graduated from high school in 1992, 12 courses appeared on the top 30 lists for all three types of institutions (see supplemental table 30-2). The top 30 list for highly selective institutions included a concentration of engineering and humanities and courses with an international theme (e.g., international relations and non-Western religion). Business courses were relatively common in the lists for selective and nonselective institutions, and student teaching and physical education were on the top 30 list only among nonselective institutions. These differences in coursetaking by the selectivity of institutions may reflect variations in the degrees that are offered and granted at these institutions.

¹To identify the top 30 courses, Adelman calculated “credit ratios” by summing all the credits earned in a course by each cohort and dividing that sum by the total number of credits earned by the cohort across all courses. Although courses may have different titles across institutions, “introduction to accounting,” for example, represents all introductory accounting courses. See *supplemental note 6* for more information about the data sets used for these analyses, including the definitions of courses and of “highly selective,” “selective,” and “nonselective” institutions.

²Courses in the top 30 for all three cohorts (i.e., bachelor’s degree recipients who graduated from high school in 1972, 1982, and 1992).

³Courses in the top 30 for the 1992 cohort, but not in the top 30 list for the 1972 and/or 1982 cohorts.

⁴Course also in the top 30 for the 1972 cohort.

⁵Course also in the top 30 for the 1982 cohort.

SOURCE: Adelman, C. (forthcoming). *The Empirical Curriculum: Changes in Postsecondary Course-Taking: 1972–2000*, table 2.1. Data from U.S. Department of Education, NCES, National Longitudinal Study of the High School Class of 1972, “Fifth Follow-Up” (NLS:72/86); High School and Beyond Longitudinal Study of 1980 Sophomores, “Postsecondary Education Transcript Study” (HS&B-So:PETS); and National Education Longitudinal Study of 1988 (NELS:88/2000), “Fourth Follow-up, Postsecondary Education Transcript Survey, 2000.”



FOR MORE INFORMATION:
Supplemental Note 6
Supplemental Tables 30-1,
30-2

EMPIRICAL CORE CURRICULUM: The top 30 postsecondary courses completed by bachelor’s degree recipients who graduated from high school in 1992

Top 30 status	Fields of study			
	Humanities and languages	Science and mathematics	Social sciences and business	Other
In top 30 for all three cohorts ²	English composition French: introductory, intermediate Literature: introductory, general Spanish: introductory, intermediate U.S. history surveys World/western civilization	Calculus General biology General chemistry General physics Organic chemistry Statistics (mathematics)	Advanced accounting General psychology Introduction to accounting Introduction to economics Introduction to sociology U.S. government	Music performance Physical education activities Student teaching
Additional courses in the top 30 for the 1992 cohort ³	American literature ⁴ Introduction to philosophy Oral communication	College algebra ⁵ Precalculus ⁵	Corporate finance ⁵ Marketing management ⁵	Bible studies Introduction to computing

Top 30 Postsecondary Courses

Table 30-1. The top 30 postsecondary courses completed by bachelor's degree recipients who graduated from high school in 1972, 1982, and 1992

Class of 1972		Class of 1982		Class of 1992	
Course	Percentage of credits earned	Course	Percentage of credits earned	Course	Percentage of credits earned
English composition	2.9	English composition	3.1	English composition	3.2
General biology	1.9	Introduction to economics	2.4	General psychology	1.8
General psychology	1.9	Calculus	2.0	Calculus	1.8
General chemistry	1.9	General chemistry	1.8	General chemistry	1.8
Calculus	1.6	General psychology	1.7	General biology	1.7
Introduction to economics	1.5	Introduction to accounting	1.7	Spanish: introductory, intermediate	1.7
U.S. history surveys	1.5	General biology	1.3	Introduction to economics	1.6
Physical education activities	1.5	Advanced accounting	1.3	U.S. history surveys	1.4
General physics	1.4	General physics	1.3	World/western civilization	1.3
Music performance	1.3	U.S. history surveys	1.3	Introduction to sociology	1.1
Introduction to sociology	1.3	Spanish: introductory, intermediate	1.2	General physics	1.1
Spanish: introductory, intermediate	1.1	Precalculus	1.1	Introduction to accounting	1.0
World/western civilization	1.1	Introduction to sociology	1.1	U.S. government	0.9
Advanced accounting	1.1	World/western civilization	1.0	Precalculus	0.9
U.S. government	1.0	Physical education activities	1.0	Student teaching	0.9
Literature: introductory, general	1.0	Business law	0.9	College algebra	0.9
Introduction to accounting	1.0	Management: general	0.9	Advanced accounting	0.9
French: introductory, intermediate	0.9	U.S. government	0.9	Statistics (mathematics)	0.8
Introduction to communications	0.9	Computer programming	0.9	Music performance	0.8
Organic chemistry	0.8	Marketing management	0.9	Organic chemistry	0.7
Art history	0.8	College algebra	0.9	Literature: introductory, general	0.7
American literature	0.8	Corporate finance	0.9	American literature	0.7
Developmental psychology	0.7	Statistics (mathematics)	0.8	Physical education activities	0.7
Student teaching	0.7	Music performance	0.8	Oral communication	0.6
Statistics (mathematics)	0.7	Introduction to communications	0.8	Introduction to philosophy	0.6
General geology	0.7	French: introductory, intermediate	0.7	French: introductory, intermediate	0.6
Business law	0.7	Art history	0.7	Corporate finance	0.6
English literature	0.7	Literature: introductory, general	0.7	Bible studies	0.6
Management: general	0.6	Organic chemistry	0.6	Marketing management	0.6
German: introductory, intermediate	0.6	Student teaching	0.6	Introduction to computing	0.6
Total percentage of credits	34.6		35.3		32.5

NOTE: Courses in bold are in the top 30 for each cohort. See supplemental note 6 for description of the transcript studies on which this indicator is based. Detail may not sum to totals because of rounding.

SOURCE: Adelman, C. (forthcoming). *The Empirical Core Curriculum: Changes in Postsecondary Course-Taking: 1972–2000*, table 2.1. Data from U.S. Department of Education, NCES, National Longitudinal Study of the High School Class of 1972, "Fifth Follow-Up" (NLS:72/86); High School and Beyond Longitudinal Study of 1980 Sophomores, "Postsecondary Education Transcript Study" (HS&B-So:PETS); and National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, Postsecondary Education Transcript Survey, 2000."

Top 30 Postsecondary Courses

Table 30-2. The top 30 postsecondary courses completed by bachelor's degree recipients who graduated from high school in 1992, by selectivity of institution awarding the bachelor's degree

Highly selective		Selective		Nonselective	
Course	Percentage of credits earned	Course	Percentage of credits earned	Course	Percentage of credits earned
Calculus	4.0	English composition	2.7	English composition	3.5
General chemistry	3.3	General chemistry	2.2	General psychology	1.9
General physics	2.4	Introduction to economics	1.9	General biology	1.7
Introduction to economics	1.8	Spanish: introductory, intermediate	1.8	Spanish: introductory, intermediate	1.6
English composition	1.7	Calculus	1.8	U.S. history surveys	1.6
Chemical engineering	1.7	General biology	1.7	General chemistry	1.5
General biology	1.5	General psychology	1.6	World/western civilization	1.5
Spanish: introductory, intermediate	1.5	U.S. history surveys	1.4	Introduction to economics	1.4
Organic chemistry	1.4	General physics	1.3	Introduction to sociology	1.2
Mechanical engineering	1.4	Precalculus	1.2	Student teaching	1.2
General psychology	1.3	World/western civilization	1.1	College algebra	1.1
Electrical engineering	1.2	Introduction to accounting	1.0	Introduction to accounting	1.0
Art history	1.0	Introduction to sociology	0.9	Advanced accounting	1.0
Spanish: advanced	1.0	French: introductory, intermediate	0.9	U.S. government	1.0
World/western civilization	0.9	Advanced accounting	0.8	Calculus	0.9
American literature	0.8	U.S. government	0.8	Music performance	0.9
Statistics (mathematics)	0.8	Statistics (mathematics)	0.8	Precalculus	0.8
French: introductory, intermediate	0.7	Organic chemistry	0.8	General physics	0.8
Physics with calculus	0.7	French: advanced	0.8	Literature: introductory, general	0.8
English literature	0.7	Electrical engineering	0.8	Physical education activities	0.8
Differential equations	0.7	Mechanical engineering	0.7	Oral communication	0.8
Non-Western religion	0.7	College algebra	0.6	Statistics (mathematics)	0.8
Women's studies: general	0.7	Architecture	0.6	American literature	0.7
International relations	0.7	Corporate finance	0.6	Introduction to philosophy	0.7
Advanced mathematics	0.7	Music performance	0.6	Bible studies	0.7
Literature: special topics	0.6	Marketing management	0.6	Introduction to computing	0.7
Precalculus	0.6	Advanced mathematics	0.6	Marketing management	0.7
Cultural anthropology	0.6	American literature	0.6	Management: general	0.6
Ethics	0.6	Drama: acting	0.5	Corporate finance	0.6
Material engineering	0.6	Ethics	0.5	Public speaking	0.6
Total percentage of credits	36.6		32.2		33.1

NOTE: Courses in bold are in the top 30 for each level of selectivity. See supplemental note 6 for description of the transcript studies on which this indicator is based and definitions of the selectivity categories. Detail may not sum to totals because of rounding.

SOURCE: Adelman, C. (forthcoming). *The Empirical Core Curriculum: Changes in Postsecondary Course-Taking: 1972–2000*, table 2.7. Data from U.S. Department of Education, NCES, National Longitudinal Study of the High School Class of 1972, "Fifth Follow-Up" (NLS:72/86); High School and Beyond Longitudinal Study of 1980 Sophomores; "Postsecondary Education Transcript Study" (HS&B-So:PETs); and National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, Postsecondary Education Transcript Survey, 2000."