

# STUDENT SCORE DISTRIBUTIONS

## Introduction

The May 2013 College Board AP Exams were taken by 2,218,578 students from 18,920 secondary schools. College and high school teachers, called Readers, who are familiar with college-level course demands, scored the free-response sections from the 3,938,100 examinations taken. Computers at ETS® scored the multiple-choice sections.

The Chief Readers, relying on their subject-matter expertise, statistical equating data, data from comparability studies, and historical trends, determine the score-setting thresholds for the 5-point AP score scale: 5 = extremely well qualified, 4 = well qualified, 3 = qualified, 2 = possibly qualified, 1 = no recommendation. Listed below are the Chief Readers who directed the scoring of the free-response sections of the May 2013 exams.

## Summary Table of Students' Scores

The scores earned on the May 2013 AP Examinations are summarized in the form of score distributions shown in the table on the next two pages. For each exam, the table provides the number and percentages of students receiving each score, the total number of students, and the mean and standard deviation of scores.

## Additional information

Released exam questions, scoring guidelines, and sample student responses for the free-response sections of AP Exams are available at AP Central® ([apcentral.collegeboard.com](http://apcentral.collegeboard.com)). Entire released exams, with multiple-choice answer keys are available for purchase at [store.collegeboard.com](http://store.collegeboard.com).

## CHIEF READERS

Art History	Bob Nauman	University of Colorado - Boulder
Biology	Domenic Castignetti	Loyola University of Chicago
Calculus	Stephen Kokoska	Bloomsburg University
Chemistry	Larry Funck	Wheaton College
Chinese Language	Telee Richard Chi	University of Utah
Computer Science	Elizabeth Johnson	Xavier University
Economics - Micro	David Anderson	Centre College
Economics - Macro	Arthur Raymond	Muhlenberg College
English Lang. & Comp.	Mary Trachsel	University of Iowa
English Lit. & Comp.	Warren Carson	University of South Carolina - Upstate
Environmental Science	Arthur Samel	Bowling Green State University
European History	Jeffrey Hamilton	Baylor University
French Language	Pascal Ifri	Washington University
German Language	Johanna Watzinger-Tharp	University of Utah
Government & Politics: Comparative	Glenn Hastedt	James Madison University
Government & Politics: United States	James Riddlesperger	Texas Christian University
Human Geography	David Lanegran	Macalester College
Italian Language	Giuseppe Cavatorta	University of Arizona
Japanese Language	Sufumi So	George Mason University
Latin	Robert Cape	Austin College
Music	Teresa Shelton Reed	University of Tulsa
Physics	Jiang Yu	Fitchburg State University
Psychology	Elizabeth Hammer	Xavier University of Louisiana
Spanish Language	Gustavo Fares	Lawrence University
Spanish Literature	Hazel Gold	Emory University
Statistics	Allan Rossman	Cal Poly - San Luis Obispo
Studio Art	Herb Weaver	Georgia Gwinnett College
United States History	Ernie Freeberg	University of Tennessee
World History	Dean Ferguson	Texas A & M University

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## AP Exams - May 2013

Exam Score	Art History		Biology		Calculus AB		Calculus BC		Calculus BC Calculus AB Subscore		Chemistry	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	2,690	11.8	11,128	5.5	67,594	23.9	47,859	45.8	58,509	56.0	26,474	18.9
4	4,857	21.4	43,886	21.6	51,290	18.1	16,862	16.1	20,794	19.9	30,033	21.5
3	6,216	27.4	73,632	36.2	48,999	17.3	18,750	17.9	11,791	11.3	26,282	18.8
2	4,361	19.2	59,482	29.3	31,796	11.2	5,953	5.7	5,689	5.4	20,866	14.9
1	4,599	20.2	15,061	7.4	83,135	29.4	15,059	14.4	7,700	7.4	36,351	26.0
Number of Students	22,723		203,189		282,814		104,483		104,483		140,006	
3 or Higher / %	13,763	60.6	128,646	63.3	167,883	59.4	83,471	79.9	91,094	87.2	82,789	59.1
Mean Score	2.85		2.88		2.96		3.73		4.12		2.92	
Standard Deviation	1.29		1.01		1.56		1.45		1.24		1.47	
Exam Score	Chinese Language (Total Group)		Chinese Language (Standard Group)**		Computer Science A		Economics - Macro		Economics - Micro		English Language	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	7,050	69.7	520	26.5	8,268	26.6	15,781	14.6	12,244	18.1	48,796	10.2
4	1,475	14.6	404	20.6	8,276	26.6	25,084	23.2	19,292	28.6	77,349	16.2
3	1,081	10.7	599	30.5	4,339	13.9	17,922	16.6	13,492	20.0	136,023	28.6
2	228	2.3	190	9.7	2,168	7.0	20,657	19.1	10,066	14.9	141,919	29.8
1	287	2.8	248	12.6	8,066	25.9	28,775	26.6	12,411	18.4	72,190	15.2
Number of Students	10,121		1,961		31,117		108,219		67,505		476,277	
3 or Higher / %	9,606	94.9	1,523	77.7	20,883	67.1	58,787	54.3	45,028	66.7	262,168	55.0
Mean Score	4.46		3.39		3.21		2.80		3.13		2.77	
Standard Deviation	0.97		1.31		1.55		1.42		1.37		1.19	
Exam Score	English Literature		Environmental Science		European History		French Language (Total Group)		French Language (Standard Group)**		German Language (Total Group)	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	29,326	7.6	9,433	8.0	11,414	10.4	4,018	19.4	2,216	14.0	1,286	25.9
4	72,510	18.8	27,668	23.4	20,620	18.8	5,434	26.2	3,994	25.3	1,163	23.4
3	121,326	31.5	19,896	16.8	38,211	34.8	6,740	32.5	5,613	35.6	1,408	28.4
2	122,109	31.7	29,993	25.4	12,110	11.0	3,597	17.4	3,157	20.0	811	16.3
1	40,305	10.5	31,298	26.5	27,523	25.0	936	4.5	809	5.1	298	6.0
Number of Students	385,576		118,288		109,878		20,725		15,789		4,966	
3 or Higher / %	223,162	57.9	56,997	48.2	70,245	63.9	16,192	78.1	11,823	74.9	3,857	77.7
Mean Score	2.81		2.61		2.78		3.39		3.23		3.47	
Standard Deviation	1.09		1.31		1.29		1.11		1.08		1.21	
Exam Score	German Language (Standard Group)**		Government & Politics Comparative		Government & Politics United States		Human Geography		Italian Language (Total Group)		Italian Language (Standard Group)**	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	391	11.7	3,830	18.9	28,784	11.3	13,719	12.0	404	20.4	146	10.1
4	843	25.1	4,305	21.2	36,474	14.3	23,238	20.3	414	20.9	312	21.5
3	1,165	34.7	4,007	19.7	66,767	26.1	23,709	20.7	571	28.8	493	34.0
2	685	20.4	4,641	22.8	63,536	24.8	21,321	18.6	454	22.9	397	27.4
1	271	8.1	3,534	17.4	60,197	23.5	32,374	28.3	137	6.9	103	7.1
Number of Students	3,355		20,317		255,758		114,361		1,980		1,451	
3 or Higher / %	2,399	71.5	12,142	59.8	132,025	51.6	60,666	53.0	1,389	70.2	951	65.5
Mean Score	3.12		3.01		2.65		2.69		3.25		3	
Standard Deviation	1.11		1.37		1.29		1.38		1.21		1.08	

\* This table reflects 3,938,100 AP Exams taken by 2,218,578 students from 18,920 secondary schools.

\*\* Standard students generally receive most of their foreign language training in U.S. schools. They did not indicate on their answer sheet that they regularly speak or hear the foreign language of the exam, or that they have lived for one month or more in a country where the language is spoken.

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## AP Exams - May 2013 (continued)

Exam Score	Japanese Language (Total Group)		Japanese Language (Standard Group)**		Latin		Music Theory		Music Theory Aural Subscore		Music Theory Nonaural Subscore	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	995	44.5	214	18.3	939	14.1	3,427	18.8	3,378	18.6	3,412	18.8
4	237	10.6	136	11.6	1,395	20.9	3,024	16.6	2,937	16.1	2,834	15.6
3	477	21.4	360	30.8	2,108	31.6	4,655	25.6	4,964	27.3	4,639	25.5
2	165	7.4	140	12.0	1,524	22.9	4,555	25.0	4,265	23.4	4,677	25.7
1	360	16.1	319	27.3	701	10.5	2,531	13.9	2,648	14.6	2,630	14.5
Number of Students	2,234		1,169		6,667		18,192		18,192		18,192	
3 or Higher / %	1,709	76.5	710	60.7	4,442	66.6	11,106	61.0	11,279	62.0	10,885	59.8
Mean Score	3.60		2.82		3.05		3.01		3.01		2.98	
Standard Deviation	1.50		1.42		1.19		1.31		1.31		1.32	
Exam Score	Physics B		Physics C E&M		Physics C Mechanics		Psychology		Spanish Language (Total Group)		Spanish Language (Standard Group)**	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	14,804	16.6	6,136	31.7	12,206	28.5	50,740	21.2	33,897	25.1	6,222	13.5
4	17,746	19.9	4,661	24.1	11,131	26.0	63,471	26.6	34,641	25.6	9,906	21.5
3	23,341	26.1	2,655	13.7	8,640	20.2	46,651	19.5	26,768	19.8	9,764	21.2
2	14,525	16.3	3,687	19.0	6,087	14.2	30,976	13.0	22,001	16.3	9,680	21.0
1	18,847	21.1	2,241	11.6	4,794	11.2	47,124	19.7	17,952	13.3	10,573	22.9
Number of Students	89,263		19,380		42,858		238,962		135,259		46,145	
3 or Higher / %	55,891	62.6	13,452	69.4	31,977	74.6	160,862	67.3	95,306	70.5	25,892	56.1
Mean Score	2.95		3.45		3.46		3.17		3.33		2.82	
Standard Deviation	1.37		1.40		1.33		1.42		1.36		1.36	
Exam Score	Spanish Literature (Total Group)		Statistics		Studio Art Drawing		Studio Art 2-D Design		Studio Art 3-D Design		United States History	
	N	% At	N	% At	N	% At	N	% At	N	% At	N	% At
5	2,020	10.8	21,622	12.8	2,543	15.3	3,346	13.4	453	10.9	47,098	10.6
4	5,293	28.2	34,460	20.3	3,388	20.4	7,797	31.3	808	19.4	95,413	21.5
3	7,067	37.6	42,020	24.8	7,093	42.7	8,583	34.4	1,565	37.6	95,660	21.6
2	3,422	18.2	31,813	18.8	3,131	18.9	4,420	17.7	1,095	26.3	119,665	27.0
1	983	5.2	39,593	23.4	442	2.7	782	3.1	246	5.9	85,054	19.2
Number of Students	18,785		169,508		16,597		24,928		4,167		442,890	
3 or Higher / %	14,380	76.6	98,102	57.9	13,024	78.5	19,726	79.1	2,826	67.8	238,171	53.8
Mean Score	3.21		2.80		3.27		3.34		3.03		2.77	
Standard Deviation	1.03		1.34		1.02		1.02		1.06		1.28	
Exam Score	World History											
	N	% At										
5	13,481	5.9										
4	31,419	13.7										
3	67,584	29.4										
2	69,590	30.2										
1	48,033	20.9										
Number of Students	230,107											
3 or Higher / %	112,484	48.9										
Mean Score	2.53											
Standard Deviation	1.14											

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