

Teaching and Academic Support

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Pittsburgh Council on Higher Education (PCHE) and Pittsburgh Filmmakers: Units both taught by PCHE schools and taken by PCHE students are collected through the Student Information System (SIS)

Units Taught: Student Information System (SIS)

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Definitions:

PCHE: Pittsburgh Council on Higher Education - a voluntary, multi-purpose consortium of the ten accredited colleges and universities in Allegheny County, Pennsylvania. As part of the consortium agreement, full-time graduate or undergraduate students at each PCHE school can cross-register at any other PCHE school at no additional expense.

Pittsburgh Filmmakers: Carnegie Mellon students are eligible to take courses at Pittsburgh Filmmakers at no additional expense

Units Taught:

Academic Year: Consists of the fall and spring semesters of a given academic year

Level: Based on the level of the student taking the course

Other: Includes units taught to special, non-degree students, and students from other colleges attending Carnegie Mellon through the Pittsburgh Council of Higher Education (PCHE)

Units: A student earns a specified number of units for each course taken at the university. Three (3) units are the equivalent of one (1) credit hour. The total units taught by a department are calculated by summing the units taken by each student for each course taught by the department.

Academic Development
Academic Years 2008-09 to 2012-13

Academic Development’s mission is to assist students in developing the skills, strategies, and behaviors needed to perform as confident, independent, and active learners. Services are designed to help both students who are having academic difficulties and those who just want to improve their performance. Currently four programs are available to assist students: Supplemental Instruction, Peer Tutoring, Academic Counseling, and EXCEL Collaborative Learning Groups.

The Supplemental Instruction (SI) program offers review sessions for traditionally difficult courses. Sessions are offered two times each week for targeted courses and are conducted by students who have previously done well in the course. Designed to supplement, not replace, class lectures and TA recitations, the sessions are interactive, student-friendly, and attendance is voluntary.

	2008-09	2009-10	2010-11	2011-12	2012-13
Unique courses supported with SI	12	11	13	12	13
Total course enrollment	1,404	1,487	2,235	2,022	1,877
Number of SI sessions	460	469	493	470	538
Unique student SI attendance	967	1,072	1,351	1,055	1,242
Cumulative student SI attendance	4,070	4,760	6,579	5,616	5,515
Total student contact hours	7,117	9,833	11,985	10,098	10,337
Percent of students attending SI	69%	72%	60%	61%	66%

Walk-in peer tutoring offers subject-specific tutoring geared primarily (but not exclusively) towards large introductory level courses. During the fall and spring semesters, tutoring is conducted on a walk-in basis Sunday through Thursday evenings and on selected afternoons. Standing appointments are available upon student request for various university courses. After completing a tutor request form students meet weekly with a peer tutor to discuss and review course content.

	2008-09	2009-10	2010-11	2011-12	2012-13
Walk-in tutoring contacts	2,917	4,060	4,488	4,859	5,519
Standing appointment contact hours	2,879	3,368	3,789	4,217	3,900

Academic Counseling provides both group and individual study skills instruction. Group workshops are available several times each semester and cover topics such as exam preparation, time management, and citing sources. Students interested in individual appointments are first given a study skills assessment. Students who require additional help can meet individually with an academic counselor. Workshops are open to all students.

	2008-09	2009-10	2010-11	2011-12	2012-13
Number of study skills assessments	41	67	99	120	128
Number of unique students meeting with counselors	53	85	118	143	136
Total individual appointments	361	678	760	888	1,057
Total workshop attendance	358	360	370	403	457
Total workshop count	11	19	19	25	23
Total contacts	772	1,123	1,429	2,061	2,291

EXCEL Collaborative Learning Groups are facilitated by a group leader, limited to six students, and are focused on student interaction and cooperative learning.

	2008-09	2009-10	2010-11	2011-12	2012-13
Number of courses supported	12	18	20	21	26
Total course enrollment	1,650	2,549	2,501	2,678	3,158
Number of sessions	142	294	361	562	1,071
Number of students attending	66	186	256	359	571
Cumulative student contacts	378	942	1,385	2,543	4,617

Cumulative data include students each time they attend.

**Intercultural Communication Center
Academic Years 2008-09 to 2012-13**

The Intercultural Communication Center (ICC) provides language support services to all nonnative English speakers at Carnegie Mellon (international students as well as students who attended all or part of high school or college in the United States).

Mission

Provide support to help nonnative English speakers, both undergraduates and graduate, succeed in their academic programs
ICC offers over 37 classes, workshops, and seminars as well as individual tutoring throughout the academic year and summer. Students can also have a placement interview for individual feedback on language skills and recommended ICC support.

Help international teaching assistants and faculty develop the skills needed to provide effective instruction at Carnegie Mellon
ICC provides training for nonnative English speakers preparing for teaching assistant jobs and also assesses speaking fluency before nonnative English speakers can work as TAs (required by Carnegie Mellon University policy and Pennsylvania law). ICC also assists international faculty with development language skills and/or culturally appropriate teaching skills.

Help both the university and departments identify and respond to the changing needs of nonnative English speakers and international students

ICC also runs workshops for domestic faculty, staff and students to help them learn to communicate more effectively with nonnative English speakers.

Clients served

	2008-09	2009-10	2010-11	2011-12	2012-13
Undergraduate	94	95	39	41	30
Graduate	739	750	863	841	1,061
Faculty and Visiting Researchers	33	32	24	26	16

Assessments and instructional hours

	2008-09	2009-10	2010-11	2011-12	2012-13
Assessments	654	768	776	893	1,253
Instructional hours	11,470	10,648	10,836	10,334	10,906

**Pittsburgh Council on Higher Education (PCHE) and Pittsburgh Filmmakers
Academic Year 2012-13**

The Pittsburgh Council on Higher Education (PCHE) is a voluntary, multi-purpose consortium of the ten accredited colleges and universities in Allegheny County, Pennsylvania. Founded in 1966, the membership includes Carlow University, Carnegie Mellon University, Chatham University, Community College of Allegheny County, Duquesne University, La Roche College, Pittsburgh Theological Seminary, Point Park University, Robert Morris University, and the University of Pittsburgh. The purpose of PCHE is to provide a means for sharing resources, insights, and information among the member institutions; to engage in joint or cooperative activities and projects; and to offer a common voice on matters that affect all of the member institutions. As part of the consortium agreement, full-time undergraduate and graduate students at each PCHE school can cross-register at any other PCHE school at no additional expense to the student.

Units taken by Carnegie Mellon students at PCHE Schools by student level

Student's college affiliation	Undergraduate	Graduate	Total
CFA	258	9	267
CIT	285	138	423
DC	174	201	375
HC	0	114	114
Interdisciplinary	21	0	21
MCS	138	126	264
SCS	27	264	291
TSB	51	87	138
TOTAL	954	939	1,893

PCHE School	Undergraduate	Graduate	Total
Chatham College	36	0	36
Community College Of Allegheny County (CCAC)	9	0	9
Duquesne University	9	9	18
Pittsburgh Theological Seminary	0	9	9
Point Park University	12	9	21
University of Pittsburgh	888	912	1,800
TOTAL	954	939	1,893

Units taught by Carnegie Mellon to PCHE students

College	Total
CFA	51
CIT	445
DC	681
HC	354
Interdisciplinary	87
MCS	519
SCS	595
TSB	249
ROTC	1,101
TOTAL	4,082

Units taken by Carnegie Mellon students at Pittsburgh Filmmakers by student level

	Undergraduate	Graduate	Non-degree	Total
Pittsburgh Filmmakers	465	135	18	618

**Units Taught by College and Student Level
Academic Years 2008-09 to 2012-13**

College	Level	2008-09	2009-10	2010-11	2011-12	2012-13
CFA	Undergraduate	91,473	93,588	94,469	90,284	85,666
	Graduate	21,551	23,926	25,459	26,532	28,840
	Special	1,546	1,673	1,981	1,503	849
	TOTAL	114,569	119,187	121,909	118,319	115,355
CIT	Undergraduate	74,661	79,728	78,385	84,363	83,368
	Graduate	86,545	99,393	110,848	119,629	136,441
	Special	609	773	702	749	580
	TOTAL	161,815	179,894	189,935	204,741	220,389
DC	Undergraduate	160,996	159,262	160,769	165,524	163,087
	Graduate	16,264	16,336	23,242	24,218	23,804
	Special	1,518	1,582	1,674	1,764	1,233
	TOTAL	178,778	177,180	185,685	191,506	188,124
HC	Undergraduate	2,698	2,616	2,784	1,521	1,158
	Graduate	87,320	91,521	92,096	99,915	108,047
	Special	594	303	312	222	372
	TOTAL	90,612	94,440	95,192	101,658	109,577
Interdisc	Undergraduate	12,197	11,559	11,994	13,439	12,830
	Graduate	12,546	13,462	17,621	18,103	19,428
	Special	168	42	242	72	99
	TOTAL	24,911	25,063	29,857	31,614	32,357
MCS	Undergraduate	105,036	106,946	108,334	108,127	106,424
	Graduate	19,971	21,787	22,763	21,664	23,240
	Special	1,004	681	613	825	788
	TOTAL	126,011	129,414	131,710	130,615	130,452
SCS	Undergraduate	51,638	53,556	54,181	57,860	62,350
	Graduate	69,256	72,158	73,622	86,736	99,452
	Special	949	1,124	887	1,295	1,167
	TOTAL	121,843	126,838	128,690	145,891	162,969
TSB	Undergraduate	41,778	38,809	37,752	37,781	41,124
	Graduate	81,655	77,928	75,651	71,365	74,202
	Special	399	261	507	705	573
	TOTAL	123,832	116,998	113,910	109,851	115,899
Other	Undergraduate	5,629	5,770	5,228	4,730	5,303
	Graduate	2,459	2,417	1,728	1,907	1,649
	Special	978	1,362	1,290	1,143	1,128
	TOTAL	9,066	9,549	8,246	7,780	8,080
GRAND TOTAL	Undergraduate	546,105	551,834	553,896	563,628	561,309
	Graduate	397,567	418,928	443,030	470,068	515,103
	Special	7,765	7,801	8,208	8,278	6,789
	TOTAL	951,437	978,562	1,005,134	1,041,974	1,083,201

**Units Taught by College, Department, and Student Level
Fall Semester 2012 and Spring Semester 2013**

College	Department	Fall 2012				Spring 2013			
		UG	Grad	Special	Total	UG	Grad	Special	Total
CFA	Architecture	10,860	2,315	6	13,181	9,531	1,894	36	11,461
	Art	5,935	827	29	6,791	5,064	935	20	6,019
	Design	6,041	2,902	9	8,952	6,134	2,366	9	8,509
	Drama	10,467	3,505	11	13,983	9,916	3,515	0	13,431
	Interdisciplinary	1,684	68	46	1,798	2,091	134	10	2,235
	Music	9,879	5,477	382	15,738	8,065	4,903	291	13,259
	TOTAL	44,865	15,093	483	60,441	40,801	13,747	366	54,914
CIT	Biomedical Engineering	3,729	3,735	18	7,482	3,150	3,362	12	6,524
	Chemical Engineering	4,969	5,970	36	10,975	5,436	6,018	57	11,511
	Civil and Environmental Engineering	5,031	8,739	45	13,815	4,240	7,471	24	11,735
	Electrical and Computer Engineering	11,633	23,022	72	34,727	10,130	19,414	108	29,652
	Engineering and Public Policy	696	4,140	12	4,848	1,713	5,241	21	6,975
	Information and Communication Technology	0	936	0	936	0	1,014	0	1,014
	Information Networking Institute	0	4,839	12	4,851	42	3,678	0	3,720
	Interdisciplinary	987	529	0	1,516	1,116	380	0	1,496
	Materials Science and Engineering	3,691	5,661	12	9,364	3,634	4,472	0	8,106
	Mechanical Engineering	11,709	11,050	108	22,867	11,462	8,601	43	20,106
	Silicon Valley	0	4,284	0	4,284	0	3,885	0	3,885
TOTAL	42,445	72,905	315	115,665	40,923	63,536	265	104,724	
DC	Center for Neural Basis of Cognition	57	267	63	387	0	234	12	246
	Collegewide	0	0	0	0	306	0	0	306
	Economics	10,170	27	27	10,224	8,278	51	9	8,338
	English	15,108	3,793	60	18,961	12,657	3,691	93	16,441
	History	10,134	1,176	141	11,451	11,034	1,117	36	12,187
	Information Systems	3,856	9	0	3,865	3,881	18	0	3,899
	Interdisciplinary	1,044	0	0	1,044	675	0	0	675
	Modern Languages	10,114	828	141	11,083	8,550	846	111	9,507
	Philosophy	5,397	912	36	6,345	7,116	985	9	8,110
	Psychology	12,452	1,457	93	14,002	10,482	1,350	120	11,952
	Social and Decision Sciences	6,818	612	81	7,511	5,746	692	18	6,456
	Statistics	8,952	3,078	24	12,054	10,260	2,661	159	13,080
	TOTAL	84,102	12,159	666	96,927	78,985	11,645	567	91,197

College	Department	Fall 2012				Spring 2013			
		UG	Grad	Special	Total	UG	Grad	Special	Total
HC	Collegewide	117	10,152	30	10,299	87	6,099	0	6,186
	Creative Enterprise	108	3,194	18	3,320	114	3,205	18	3,337
	Information Systems	72	24,228	0	24,300	120	19,359	18	19,497
	Medical Management	0	1,938	0	1,938	0	1,830	0	1,830
	Public Management	12	3,582	0	3,594	6	1,998	24	2,028
	Public Policy and Management	234	15,993	192	16,419	288	16,469	72	16,829
	TOTAL	543	59,087	240	59,870	615	48,960	132	49,707
Interdisc	Universitywide Studies	5,700	51	0	5,751	2,267	81	12	2,360
	Entertainment Technology	60	9,006	0	9,066	135	8,889	0	9,024
	International Education	756	0	0	756	1,044	0	0	1,044
	StuCo (Student Led Courses)	897	24	0	921	1,881	93	0	1,974
	TOTAL	7,413	9,081	0	16,494	5,327	9,063	12	14,402
MCS	Biological Sciences	6,972	3,328	108	10,408	7,156	2,943	216	10,315
	Chemistry	10,289	3,502	39	13,830	7,967	3,205	31	11,203
	Interdisciplinary	36	168	0	204	0	192	0	192
	Mathematical Sciences	25,528	2,181	59	27,768	22,808	2,132	128	25,068
	Physics	13,061	2,937	81	16,079	12,607	2,652	126	15,385
	TOTAL	55,886	12,116	287	68,289	50,538	11,124	501	62,163
SCS	Computational Biology	270	1,389	87	1,746	336	2,062	102	2,500
	Computer Science	28,073	12,016	248	40,337	25,940	12,974	127	39,041
	Human-Computer Interaction	1,581	6,501	36	8,118	1,822	5,121	18	6,961
	Institute for Software Research	24	6,422	0	6,446	66	5,590	24	5,680
	Language Technologies Institute	186	7,233	30	7,449	576	6,404	54	7,034
	Machine Learning	300	5,205	120	5,625	534	5,580	180	6,294
	Robotics	677	9,757	108	10,542	1,941	8,228	60	10,229
	Software Engineering	102	3,553	12	3,667	12	2,701	48	2,761
	TOTAL	31,213	52,076	641	83,930	31,227	48,660	613	80,500
TSB	Business Administration	20,088	90	117	20,295	20,832	147	144	21,123
	School of Business	108	39,989	156	40,253	96	33,976	156	34,228
	TOTAL	20,196	40,079	273	60,548	20,928	34,123	300	55,351
Other									
		2,637	896	645	4,178	2,666	753	483	3,902
GRAND TOTAL		289,300	273,492	3,550	566,342	272,010	241,611	3,239	516,860

**Library Collections and Utilization
Fiscal Years 2009 to 2013**

University Libraries

Hunt Library - Subjects: Arts, Business, Humanities, and Social Sciences. Departments and Units include Acquisitions; Archives/Digital Library Initiatives; Arts and Special Collections, including Architecture Archives, Arts Reference, Audio Collection, Fine and Rare Book Room, and Visual Resources Collection; Cataloging; Dean's Office/Business Services; Hunt Library Reference; Library Information Technology, including Operations and R&D; Access Services, including Circulation and Reserves, interlibrary Loan, Periodicals, and Video Collection. Also located in Hunt Library: Computing Services Cluster; Hunt Institute for Botanical Documentation, including Hunt Botanical Library and Gallery; and Osher Lifelong Learning Institute

Mellon Institute Library - Subjects: Chemistry and Biology

Off-site Storage - Older, infrequently-used library materials are available by request (24-hour turnaround)

Posner Center - Featuring Posner Memorial Collection of rare books and artifacts; and collection exhibits

Sorrells Library - Subjects: Computer Science, Engineering, Mathematics, Physics, Science, and Technology

Qatar Library - Subjects: Biological Sciences, Business Administration, Computational Biology, Computer Science, and Information Systems

Other Carnegie Mellon Libraries: Hunt Botanical Library and Gallery, Research Library, Botany and Art;

Software Engineering Institute Library, Research Library: Security, Software, and Technology;

and Universal Digital Library, digitized media in all genres and subject areas, such as books, images, journals, music, etc.

Library collections	2009	2010	2011	2012	2013
Total print volumes (books, bound journals, etc.)	1,129,808	1,143,635	1,155,696	1,133,552	1,135,896
Current subscriptions	1,846	1,645	1,522	1,472	1,396
Electronic subscriptions*	73,475	85,327	103,643	135,166	116,070
Research Showcase Documents	256	3,331	5,969	9,921	11,388
Microforms (books, serial titles, govt documents)	1,101,685	1,128,475	1,155,833	1,164,984	1,190,732
Unmounted pictures and slides	152,447	152,448	153,448	142,376	40,904
Audio materials (cassettes, records, CD's)	27,628	28,309	28,567	28,933	29,160
Video materials	11,533	12,557	13,487	13,843	13,948
Music scores	19,917	19,759	19,422	19,269	19,195
Maps	161	161	161	161	161
Library material duplication					
Photocopies made on public copiers	154,253	117,024	80,063	53,601	28,971
Microform copies and scans made in libraries	22,988	24,543	27,094	12,858	12,269
Pages printed from public laser printers	2,438,998	2,258,890	2,034,974	2,492,554	2,053,753
Number of visits					
Hunt Library	621,471	1,085,749	645,142	599,469	588,527
Posner Center	1,787	1,356	1,382	1,456	1,325
Sorrells Library	172,320	155,711	177,857	195,638	217,927
Virtual visits	1,408,285	2,044,252	1,649,229	1,876,059	2,764,925
Total	2,203,863	3,287,068	2,473,610	2,672,622	3,572,704
Seating					
Hunt Library	660	660	664	720	720
Mellon Institute Library	122	122	122	112	112
Sorrells Library	155	155	156	165	165
Total	937	937	942	997	997

* A new system was implemented that counts subscriptions differently

	2009	2010	2011	2012	2013
Circulation of library materials	128,147	122,108	119,558	94,747	108,460
Books used in libraries	33,526	36,041	34,205	27,634	25,095
Library instruction					
Number of classes	165	154	161	159	182
Number of participants	3,377	3,481	3,761	3,484	3,748
Reference questions answered					
Digital	2,938	2,608	3,223	2,774	2,653
Traditional	11,142	11,660	9,208	7,506	6,235

Electronic information resources and access

The University Libraries provide access to a variety of digital information, including the library catalog, other local databases, and a growing number of commercial databases that are licensed for use by the university community. Access methods continue to change as the delivery of electronic information evolves. Currently, Internet access predominates.

The web-based library catalog (Cameo) contains records of items owned by the libraries, as well as items on order or being catalogued for library collections. Cameo is part of a system that integrates acquisitions and cataloging functions with circulation, reserve, and user service functions. Users can see if items are available or checked out when they use the library catalog; they can also request services.

As the digital library environment matures, more full-text documents and images are becoming available. Some vendors who are providing full-text documents are no longer reporting numbers of searches.

	2009	2010	2011	2012	2013
Total full-text docs retrieved from licensed resources	3,056,990	1,721,795	1,546,931	1,682,281	1,577,220
Documents downloaded from Research Showcase	6,935	39,569	217,657	248,585	961,502
Reserve items used					
Digital text **	47,584	47,252	34,857	10,946	7,449
Traditional	2,849	6,066	4,721	1,593	3,833
Interlibrary loan					
Items borrowed	19,132	17,930	14,006	13,850	12,071
Items loaned	4,361	5,699	4,745	4,795	6,175
PALCI (PA Academic Library Consortium, Inc.)					
Items borrowed	2,885	3,464	3,551	2,124	2,216
Items loaned	7,519	8,372	5,959	692	1,903

** Increasing numbers of documents are now stored in Blackboard

Computing Services
Academic Years 2008-09 to 2012-13

Computing Services supports the university’s research and educational missions by:

- Building and maintaining basic and advanced communications infrastructure
- Building and maintaining basic and advanced middleware infrastructure and directory services
- Maintaining central computing clusters and associated printing
- Deploying and maintaining shared e-mail and web services (Cyrus, spam filtering, MyAndrew, the portal)
- Deploying and maintaining enterprise administrative applications
- Working with faculty to design and teach Computing at Carnegie Mellon and providing instructional technology
- Monitoring the security and fair use of our network and protecting it against abuse and attack
- Providing policy, guidance, consultation, tools, security systems training, and information
- Supporting university efforts to provide emergency notification and business continuity plans
- Answering technical computing related questions at our Help Center
- Developing and maintaining an extensive on-line collection of computing related documentation

Academic spaces	2010-11	2011-12	2012-13
Virtual desktops via virtual Andrew	100	100	100
Physical computers	-	405	376
Traditional Clusters	13	13	12
Multimedia Clusters	3	3	3
Collaborative Clusters	2	2	3
Technology-equipped classrooms	84	85	86

Andrew printing	2008-09	2009-10	2010-11	2011-12	2012-13
Number of printers	26	26	32	33	33
Pages printed (in millions)	6	7	7	7	7

Web stations	2008-09	2009-10	2010-11	2011-12	2012-13
Number of stations	5	5	7	16	18

Classroom technologies	2010-11	2011-12	2012-13
Clicker-equipped classrooms	25	26	27
Clickers, instructor kit	68	68	68
Clickers, classroom kit	5	5	5

Media production and event support	2010-11	2011-12	2012-13
Course sessions captured	210	248	303
Special event sessions captured	280	333	270
Total events supported	1,419	1,257	1,362

Videoconferencing	2010-11	2011-12	2012-13
Classrooms	3	7	6
Conference rooms	17	17	17
Individual and office units	41	41	41
Mobile units	8	8	8
Hours	1,821	2,202	1,848

Help center	2008-09	2009-10	2010-11	2011-12	2012-13
Number of walk-in users	3,580	2,181	1,877	2,044	3,006
Number of phone requests	8,278	5,659	5,118	5,660	5,215
Number of e-mail requests	15,676	15,422	16,070	17,194	19,496
Percentage of requests resolved on first contact	78%	83%	81%	79%	81%

Electronic mail	2008-09	2009-10	2010-11	2011-12	2012-13
Average weekly e-mails sent by cmu.edu	655,122	735,779	847,802	595,302	446,406
Average weekly e-mails from outside cmu.edu			1,099,463	1,082,010	1,201,553
Average weekly e-mails blocked by spam filter			330,989	593,037	430,286
Average weekly e-mails blocked due to virus			77,145	63,313	25,834

Infrastructure servers	2008-09	2009-10	2010-11	2011-12	2012-13
Virtual machines	179	513	503	863	1,148