

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 to the student.

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

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 2006-07 to 2010-11

Academic Development’s mission is to assist students in developing the skills, strategies, and behaviors needed to perform as confident, independent, and active learners. Their 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.

Supplemental Instruction

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.

	2006-07	2007-08	2008-09	2009-10	2010-11
Unique courses supported with SI	18	13	12	11	13
Total course enrollment	3,185	1,908	1,404	1,487	2,235
Number of SI sessions	586	485	460	469	493
Unique student SI attendance	1,802	1,273	967	1,072	1,351
Cumulative student SI attendance	6,265	5,529	4,070	4,760	6,579
Total student contact hours	11,450	9,201	7,117	9,833	11,985
Percent of students attending SI	57%	67%	69%	72%	60%

Peer Tutoring

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.

	2006-07	2007-08	2008-09	2009-10	2010-11
Walk-in tutoring contacts	2,893	2,869	2,917	4,060	4,488
Standing appointment contact hours	3,365	2,274	2,879	3,368	3,789

Academic Counseling

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.

	2006-07	2007-08	2008-09	2009-10	2010-11
Number of study skills assessments	76	58	41	67	99
Number of unique students meeting with academic counselors	73	54	53	85	118
Total individual appointments	253	269	361	678	760
Total workshop attendance	315	266	358	360	370
Total workshop count	28	16	11	19	19
Total contacts	644	593	772	1,123	1,429

EXCEL Collaborative Learning Groups

These groups are facilitated by a group leader, limited to six students, and are focused on student interaction and cooperative learning.

	2007-08	2008-09	2009-10	2010-11
Number of courses supported	12	12	18	20
Total course enrollment	1,363	1,650	2,549	2,501
Number of sessions	194	142	294	361
Number of students attending	102	66	186	256
Cumulative student contacts	581	378	942	1385

Cumulative data include students each time they attend.

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). Since the ICC's inception in 1985, this support has become increasingly crucial as the number of international students at the university has grown from 350 students to 4,032 in Fall 2011.

Mission

Provide support to help nonnative English speakers, both undergraduates and graduate, succeed in their academic programs
ICC offers over 33 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 of language skills and 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

	2006-07	2007-08	2008-09	2009-10	2010-11
Undergraduate	97	92	94	95	39
Graduate	604	667	739	750	863
Faculty and Visiting Researchers	45	44	33	32	24

Assessments and instructional hours

	2006-07	2007-08	2008-09	2009-10	2010-11
Assessments	567	661	654	768	776
Instructional hours	9,556	9,747	11,470	10,648	10,836

Library Collections and Utilization

Fiscal Years 2007 to 2011

University Libraries

- **Engineering and Science Library** - Subjects: Computer Science, Engineering, Mathematics, Physics, Science, and Technology
- **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
- **Qatar Library** - Subjects: Business and Computer Science
- **Other Carnegie Mellon Libraries:** Hunt Botanical Library and Gallery, Research Library, Botany and Art; Engineering Institute Library, Research Library: Security, Software, and Technology; and Universal Digital Library, digitized media in all genres and subject areas, such as books, collections, images, journals, multimedia, music, etc.

Library collections	2007	2008	2009	2010	2011
Total print volumes (books, bound journals, etc.)	1,098,181	1,112,393	1,129,808	1,143,635	1,155,696
Current subscriptions:	1,969	1,955	1,846	1,645	1,522
Periodicals, newspapers, government documents					
Electronic subscriptions	53,728	48,019	73,475	85,327	103,643
Microforms:	1,050,602	1,074,202	1,101,685	1,128,475	1,155,833
Books, serial titles, government documents					
Graphic materials:	200,635	201,643	152,447	152,448	153,448
Unmounted pictures and slides					
Audio materials:	27,098	27,455	27,628	28,309	28,567
Cassettes, phonograph records, CDs					
Video materials	10,297	10,499	11,533	12,557	13,487
Music scores	20,168	20,069	19,917	19,759	19,422
Maps	161	161	161	161	161
Library material duplication					
Photocopies made on public copiers	220,391	205,510	154,253	117,024	80,063
Microform copies and scans made in libraries	36,848	32,289	22,988	24,543	27,094
Pages printed from public laser printers	1,375,431	2,068,170	2,438,998	2,258,890	2,034,974
Number of visits					
Engineering and Science Library	145,901	167,614	172,320	155,711	177,857
Hunt Library	500,091	612,686	621,471	1,085,749	645,142
Posner Center	1,324	1,173	1,787	1,356	1,382
Virtual visits	2,001,165	1,998,101	1,408,285	2,044,252	1,649,229
Total	2,648,481	2,779,574	2,203,863	3,287,068	2,473,610
Seating					
Engineering and Science Library	155	155	155	155	156
Hunt Library	652	660	660	660	664
Mellon Institute Library	122	122	122	122	122
Total	929	937	937	937	942

	2007	2008	2009	2010	2011
Circulation of library materials	127,764	101,762	128,147	122,108	119,558
Books used in libraries	41,583	39,113	33,526	36,041	34,205
Library instruction					
Number of classes	144	156	165	154	161
Number of participants	3,514	2,795	3,377	3,481	3,761
Reference questions answered					
Digital	2,220	2,706	2,938	2,608	3,223
Traditional	13,531	11,108	11,142	11,660	9,208
Directional help given	17,975	8,616	8,256	7,062	7,393

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 cataloged 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.

Users may access Cameo from any computer with Internet capability at: <http://search.library.cmu.edu>

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.

Searches	2007	2008	2009	2010	2011
Performed using Cameo (Library Catalog)	573,607	543,141	417,231	882,749	651,758
Performed to licensed and local web resources	428,699	564,508	595,000	854,164	705,788
Total database searches	1,002,306	1,107,649	1,012,231	1,736,913	1,357,546
Total full-text documents retrieved	879,462	1,099,963	3,056,990	1,721,795	1,546,931
Electronic reserve usage (items viewed)	75,457	103,611	36,521	49,176	34,346
Images scanned for the digital library	159,423	112,715	38,750	37,003	38,809
Reserve items used	2007	2008	2009	2010	2011
Digital	75,457	103,611	36,521	98,127	161,237
Traditional	5,716	6,190	2,849	6,066	4,721
Resource sharing and document delivery	2007	2008	2009	2010	2011
Interlibrary loan					
Items borrowed	18,624	18,431	19,132	17,930	14,006
Items loaned	5,414	4,387	4,361	5,699	4,745
PALCI (Pennsylvania Academic Library Consortium, Inc.)					
Items borrowed	2,321	2,557	2,885	3,464	3,551
Items loaned	6,808	3,192	7,519	8,372	5,959
Electronic current awareness service					
Individuals using site license subscription	73	73	74	74	74

Computing Services 2007 to 2011

Computing Services supports the university's research and educational missions:

- Building and maintaining basic and advanced communications infrastructure, from phone lines to wireless access points
- Building and maintaining basic and advanced middleware infrastructure and directory services to provide secure and robust identity management 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 the faculty to design and teach Computing at Carnegie Mellon and providing essential and innovative instructional technologies within the classroom
- 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 awareness, information, and personal practice
- 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 that supports our products and services

Cluster Spaces				
Virtual desktops via virtual Andrew				2010-11 100

Andrew Printing				
		2008-09	2009-10	2010-11
Number of printers		26	26	32
Pages printed (in millions)		6.4	6.8	7

Web Stations				
		2008-09	2009-10	2010-11
Number of stations		5	5	7

Classroom Technologies				
				2010-11
Clickers, instructor kit				68
Clickers, classroom kit				5

Media Production and Event Support				
				2010-11
Course sessions captured				210
Special event sessions captured				280
Total events supported				1,419

Videoconferencing				
				2010-11
Classrooms				3
Conference rooms				17
Individual and office units				41
Mobile units				8
Hours				1,821

Help Center					
		2007-08	2008-09	2009-10	2010-11
Number of walk-in users		3,280	3,580	2,181	1,877
Number of phone requests		6,883	8,278	5,659	5,118
Number of e-mail requests		12,793	15,676	15,422	16,070
Percentage of requests resolved on first contact		87%	78%	83%	81%

Electronic mail					
		2007-08	2008-09	2009-10	2010-11
Average weekly e-mails sent by andrew.cmu.edu		388,969	655,122	735,779	847,802
Average weekly e-mails delivered from outside andrew.cmu.edu					1,099,463
Average weekly e-mails blocked as spam					330,989
Average weekly e-mails blocked due to virus					77,145

Infrastructure servers				
		2008-09	2009-10	2010-11
Virtual machines		179	513	503

**Pittsburgh Council on Higher Education (PCHE)
and Pittsburgh Filmmakers
Academic Year 2010-11**

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	228	54	282
CIT	336	123	459
DC	471	237	708
HC	0	222	222
Interdisc	135	0	135
MCS	174	129	303
SCS	93	189	282
TSB	222	66	288
TOTAL	1,659	1,020	2,679

PCHE School	Undergraduate	Graduate	Total
Carlow University	24	0	24
Chatham College	51	9	60
Community College Of Allegheny County (CCAC)	102	12	114
Duquesne University	33	9	42
Point Park University	9	0	9
University of Pittsburgh	1,440	990	2,430
TOTAL	1,659	1,020	2,679

Units taught by Carnegie Mellon to PCHE students

College	Total
CFA	99
CIT	536
DC	681
HC	210
Interdisc	183
MCS	303
SCS	519
TSB	207
ROTC	1,269
TOTAL	4,007

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

	Undergraduate	Graduate	Non-degree	Total
Pittsburgh Filmmakers	471	36	18	525

Units Taught by College and Student Level
Academic Years 2006-07 to 2010-11

College	Level	2006-07	2007-08	2008-09	2009-10	2010-11
CFA	Undergraduate	85,040	86,019	91,473	93,588	94,469
	Graduate	20,871	21,319	21,551	23,926	25,459
	Special	1,281	1,876	1,546	1,673	1,981
	TOTAL	107,192	109,214	114,569	119,187	121,909
CIT	Undergraduate	70,122	71,070	74,661	79,728	78,385
	Graduate	67,399	71,534	86,545	99,393	110,848
	Special	843	696	609	773	702
	TOTAL	138,364	143,300	161,815	179,894	189,935
DC	Undergraduate	152,908	159,447	160,996	159,262	160,769
	Graduate	15,628	16,278	16,264	16,336	23,242
	Special	1,251	1,455	1,518	1,582	1,674
	TOTAL	169,787	177,180	178,778	177,180	185,685
HC	Undergraduate	1,752	1,546	2,698	2,616	2,784
	Graduate	43,682	50,103	87,320	91,521	92,096
	Special	288	312	594	303	312
	TOTAL	45,722	51,961	90,612	94,440	95,192
Interdisc	Undergraduate	11,762	11,403	12,197	11,559	11,994
	Graduate	41,776	43,508	12,546	13,462	17,621
	Special	198	129	168	42	242
	TOTAL	53,736	55,040	24,911	25,063	29,857
MCS	Undergraduate	103,657	105,368	105,036	106,946	108,334
	Graduate	18,332	19,385	19,971	21,787	22,763
	Special	556	733	1,004	681	613
	TOTAL	122,545	125,486	126,011	129,414	131,710
SCS	Undergraduate	45,247	48,824	51,638	53,556	54,181
	Graduate	62,206	63,738	69,256	72,158	73,622
	Special	873	1,113	949	1,124	887
	TOTAL	108,326	113,675	121,843	126,838	128,690
TSB	Undergraduate	36,474	38,244	41,778	38,809	37,752
	Graduate	69,599	74,146	81,655	77,928	75,651
	Special	462	330	399	261	507
	TOTAL	106,535	112,720	123,832	116,998	113,910
Other	Undergraduate	6,371	5,956	5,629	5,770	5,228
	Graduate	2,144	2,709	2,459	2,417	1,728
	Special	873	1,020	978	1,362	1,290
	TOTAL	9,388	9,685	9,066	9,549	8,246
GRAND TOTAL	Undergraduate	513,333	527,877	546,105	551,834	553,896
	Graduate	341,637	362,720	397,567	418,928	443,030
	Special	6,625	7,664	7,765	7,801	8,208
	TOTAL	861,595	898,261	951,437	978,562	1,005,134

**Units Taught by Department and Student Level
Fall Semester 2010 and Spring Semester 2011**

College	Department	Fall 2010				Spring 2011			
		UG	Grad	Special	Total	UG	Grad	Special	Total
CFA	Architecture	12,654	1,957	21	14,632	12,213	1,703	6	13,922
	Art	6,422	917	19	7,358	5,854	991	0	6,845
	Design	6,859	3,531	78	10,468	5,571	2,489	24	8,084
	Drama	10,891	3,289	16	14,196	10,280	3,467	18	13,765
	Interdisciplinary	1,812	77	9	1,898	3,201	147	29	3,377
	Music	9,168	3,361	1,158	13,687	9,545	3,532	603	13,680
	TOTAL	47,805	13,131	1,301	62,237	46,664	12,328	680	59,672
CIT	Biomedical Engineering	3,023	2,334	33	5,390	3,119	2,337	9	5,465
	Chemical Engineering	5,442	5,173	33	10,648	4,759	4,675	60	9,494
	Civil and Environmental Engineering	4,308	5,937	111	10,356	3,880	5,238	105	9,223
	Electrical and Computer Engineering	11,267	19,843	60	31,170	9,787	18,001	48	27,836
	Engineering and Public Policy	858	3,715	18	4,591	3,549	4,721	12	8,282
	Information Networking Institute	18	4,205	0	4,223	30	2,404	0	2,434
	Interdisciplinary	1,026	342	0	1,368	1,164	525	0	1,689
	Materials Science and Engineering	3,715	4,230	48	7,993	3,303	4,093	18	7,414
	Mechanical Engineering	9,990	7,752	75	17,817	9,135	7,079	72	16,286
	Silicon Valley	12	4,572	0	4,584	0	3,672	0	3,672
TOTAL	39,659	58,103	378	98,140	38,726	52,745	324	91,795	
DC	Economics	9,138	18	18	9,174	9,486	9	36	9,531
	English	14,759	3,855	75	18,689	13,647	3,507	111	17,265
	History	11,177	1,446	135	12,758	10,077	1,368	147	11,592
	Interdisciplinary	589	0	9	598	936	0	18	954
	Modern Languages	11,880	662	246	12,788	9,585	728	102	10,415
	Philosophy	5,697	1,035	9	6,741	6,747	1,152	60	7,959
	Psychology	10,890	1,392	162	12,444	10,594	1,313	63	11,970
	Social and Decision Sciences	6,306	793	84	7,183	5,192	765	72	6,029
	Statistics	7,998	2,646	123	10,767	9,618	2,223	141	11,982
	Center for Neural Basis of Cognition	0	147	0	147	0	183	48	231
TOTAL	81,620	11,994	876	94,490	79,149	11,248	798	91,195	
HC	Collegewide	219	6,282	24	6,525	180	3,537	24	3,741
	Creative Enterprise	114	3,036	6	3,156	36	2,982	18	3,036
	Information Systems	696	20,430	60	21,186	570	13,572	6	14,148
	Medical Management	0	2,166	0	2,166	0	1,938	0	1,938
	Public Management	30	2,718	6	2,754	0	2,526	6	2,532
	Public Policy and Management	345	16,519	60	16,924	594	16,390	102	17,086
	TOTAL	1,404	51,151	156	52,711	1,380	40,945	156	42,481
Interdisc	Universitywide Studies	6,027	27	6	6,060	1,842	129	6	1,977
	Computational Biology	12	724	102	838	27	897	93	1,017
	Entertainment Technology	123	7,926	23	8,072	192	7,822	0	8,014
	International Education	792	0	0	792	1,188	0	0	1,188
	StuCo (Student Led Courses)	585	33	3	621	1,206	63	9	1,278
	TOTAL	7,539	8,710	134	16,383	4,455	8,911	108	13,474
MCS	Biological Sciences	7,214	3,615	57	10,886	7,722	3,317	120	11,159
	Chemistry	10,862	3,176	94	14,132	8,845	2,654	10	11,509
	Interdisciplinary	24	132	0	156	48	120	0	168
	Mathematical Sciences	27,338	2,194	79	29,611	21,526	1,964	146	23,636
	Physics	13,396	2,909	52	16,357	11,359	2,682	55	14,096
	TOTAL	58,834	12,026	282	71,142	49,500	10,737	331	60,568
SCS	Computer Science	23,797	10,240	99	34,136	24,887	9,443	95	34,425
	Human-Computer Interaction	1,027	5,620	81	6,728	921	4,625	0	5,546
	Institute of Software Research	42	3,988	12	4,042	21	3,606	66	3,693
	Language Technologies Institute	252	5,806	12	6,070	384	5,617	72	6,073
	Machine Learning	264	3,210	120	3,594	702	2,901	156	3,759
	Robotics	504	5,858	72	6,434	1,236	5,477	60	6,773
	Software Engineering	138	3,914	18	4,070	6	3,317	24	3,347
	TOTAL	26,024	38,636	414	65,074	28,157	34,986	473	63,616
TSB	Business Administration	18,492	291	81	18,864	19,050	141	180	19,371
	School of Business	126	40,860	132	41,118	84	34,359	114	34,557
	TOTAL	18,618	41,151	213	59,982	19,134	34,500	294	53,928
Other		2,476	825	699	4,000	2,752	903	591	4,246
GRAND TOTAL		283,979	235,727	4,453	524,159	269,917	207,303	3,755	480,975