

REFLECTIVE ESSAY

Graduate Education at Mānoa

Graduate Division

Office of the Vice Chancellor for Research and Graduate Education

January 4, 2003

Graduate Enrollment. Since 1994, enrollments in graduate programs were declining; however in Fall 2002 they increased. It is too early to say that the trend has truly reversed, but the signs are positive. The following presents graduate enrollment data since 1991.

<u>Fall of</u>	<u>Enrollment</u>
1991	4,357
1992	4,500
1993	4,587
1994	4,742
1995	4,680
1996	4,422
1997	4,204
1998	4,213
1999	4,109
2000	3,970
2001	3,969
2002	4,259

The recently adopted strategic plan calls for increasing graduate enrollment and the Graduate Division has just hired an international recruiting specialist.

Degrees Awarded. Between 1997-98 and 2001-02, a total of 5,482 students graduated from UH Mānoa with master's or doctoral degrees. Three programs graduated over 400 master's and doctoral students over the five-year period: Business Administration, Social Work, and Teacher Education. A table detailing the number of degrees granted by program is available at <http://www.hawaii.edu/wasc/uhm/table-3.1.pdf>.

Of the 15 graduate degree programs or major sub-programs that awarded fewer than four degrees annually during the past five years, six have been closed to admission (but still have students enrolled), five have been restructured, two are sub-fields in Biomedical Sciences (one of which is new). Of the remaining two, one is Natural Resource and Environmental Management, which recently has completely restructured its program. Undergraduate enrollment in the new field has been increasing and graduate enrollment is expected to also increase. The remaining field is Communication and Information Science. This is an interdisciplinary doctoral program housed in four departments in three colleges. After a decade of a nearly constant enrollment of around 30 students, enrollment has started to

increase. Over the past two years, enrollment increased 39% and the number of graduates is expected to follow suit.

Time to Degree. The average time to degree for all master's programs (for students graduating during the past five years) was 2.7 years. This is not unreasonable given that the minimum requirements typically take two years to fulfill. However, the average tends to be higher in the sciences, probably due to students taking more time to complete a thesis and lower in the professional programs that are typically course oriented with no thesis requirement.

The time to degree for doctoral programs continues to be problematic. The average time to degree for students graduating in the past five years was 5.44 years. It is somewhat difficult to interpret this measure because it includes students who started after receiving a master's as well as students who entered the PhD program without a master's degree.

Students are expected to finish their graduate programs within seven years. This has not been an issue for the master's programs, but it has been a problem in the doctoral programs. During the past five years, 187 or 27% of the students who received doctoral degrees took longer than seven years.

In the past, an extension was granted whenever the field of study so requested. In fact, it was rather pro forma. The Graduate Division recently changed its policy on adequate progress and time to degree. The policy now reads:

“Candidates for advanced degrees are expected to complete all requirements within seven years of admission to the program. Candidates who fail to complete all requirements in the specified time are subject to academic action, including being placed on probation or dismissal.

If the student has completed all requirements for the degree except the thesis or dissertation at the end of year seven, the field may petition the Dean for an extension. The petition must define measurable benchmarks. The extension must be renewed annually. Renewal only possible if the student is meeting his or her benchmarks. If the student fails to meet benchmarks, s/he will be placed on probation. If the student then makes progress, s/he will be taken off probation, if not, s/he will be dismissed. If the field does not petition for an extension, the student is placed on probation.

If student has not yet reached the thesis or dissertation stage or the student is plan B, the field may either dismiss or place the student on probation.

An approved leave of absence is not counted in the seven years.”

Attrition Rates. According to the discussion at the last meeting of the Council of Graduate Schools (December 2002), attrition is a problem that graduate schools should address, particularly in the doctoral programs. UH data shows that “false starts” are a relatively common occurrence in the master’s programs but not in the doctoral programs. During the period starting in the Fall of 1991 and ending in the Spring of 2001, 10% of the new master’s students dropped out during their first year compared only 6.5% of the first-year doctoral students.

However, the percentage of the students getting a degree, which is essentially the reciprocal of attrition, was quite good for master’s students. This measure is, of course, dependent on how long ago the students started the program and what type of degree they are pursuing. Over 75% of master’s students who started at least 5 years ago, received 1 or more graduate degrees by Spring 2002. Taking into account that over 10% drop out the first year, the probability of graduating within five years is over 85%, if you survive the first year.

The story for doctoral students who receive a graduate degree is similar. However, if we examine the percent of the doctoral students actually receiving a doctorate degree, it is significantly lower. Sixty-four percent of students who started in the Fall of 1991 subsequently receive their doctoral degrees. However, this must be tempered by the length of time it takes to get a PhD. If the total number of students (new and continuing) who were enrolled in doctoral programs in Fall 1991 is examined, 74% subsequently received their degree.

The Graduate Division is still exploring methods of increasing the completion rate and will be closely monitoring the work on this topic being done by the Council of Graduate Schools. Two programs are already underway. One is to increase the funding for graduate students. So far this has only occurred as a by-product of the efforts to increase extramural funding. However, this is one of the goals of the recently adopted strategic plan. The second is to ensure that students are actually strongly mentored, particularly those who are having trouble completing their degree.

Graduate Student Support. Graduate student support continues to be a campus-wide issue. Table 1 details the number of students supported with either graduate assistantships, tuition waivers, and/or fellowships in Fall 2002. Support in the sciences is nearly a hundred percent when those students who chose to support themselves are included (e.g., students at the dissertation stage who are employed elsewhere, some federal employees or military personnel, some UH employees, etc.). Support in the Languages, Social Sciences, Arts, Humanities, and the professional programs continues to be quite low and consists of teaching assistantships, tuition waivers, and a few fellowships.

The number of graduate assistantships has been increasing. This fall, there are 1,071 students with graduate assistantships. The increase is due almost entirely to the increase in research appointments resulting from an increase in extramural funds.

Support for doctoral students is relatively more available than support for master's students (54 vs. 31 percent of students supported respectively). Tables 2 and 3 provide separate breakdowns of support for master's and doctoral students.

Increasing student support is always a difficult task, and even more so in times of limited State support. The one method that recently worked was increasing funding to faculty and programs. The Vice-Chancellor for Research and Graduate Education has been very proactive in promoting faculty efforts to obtain extramural funding, not only in the disciplines that are traditionally well supported, but in the Arts, Humanities, Languages, and Social Sciences as well. The primary focus of the Director of Research Relations is to promote faculty efforts to obtain more funding, particularly in disciplines that historically have not been successful in obtaining extramural awards. The Graduate Division has also been proactive in supporting and encouraging faculty to apply for awards that support students. For example, this fall, 11 IGERT applications were submitted.

Program Quality. This continues to be an issue. Little change has occurred since the last WASC visit. This is not unexpected due to the continuing budget crisis facing the University. However, the new Strategic Plan addresses this issue and both the President and the Chancellor have expressed their support. Further, program reviews are now on schedule and are valuable in providing a peer review of the quality of graduate programs.

Communication with Graduate Students. Most of the direct interaction takes place with the Graduate Student Organization (GSO). Two members of the GSO are members of the Graduate Council; the GSO is represented on all standing Council committees, as well as all fellowship and student award committees. The Graduate Division contributes to the GSO travel fund and works with the GSO on developing new initiatives.

TA Training. As of Fall 2002, TA training will be mandatory for all new teaching assistants. Minimally, the training consists of classes and seminars before the semester starts on such topics as classroom management, grading policies, university procedures (where to go for help and how to deal with specific problems and grievances.), mentoring and monitoring each TA during the semester, and an end-of-semester evaluation.

Preparing Future Faculty. The preparing future faculty program was restarted this fall. This consists of series of presentations on how to apply for a job, how employer expectations vary between academia, government, and industry, actions students can take to prepare themselves for the job market (e.g., externships, teaching, publishing, attending professional meeting or industry meetings, etc.) as well as seminars by recent graduates.

Table 1- Number of students supported, Fall 2002

Program	Enroll	GA	TW	Fellow.	Total	Percent
Accounting	96		1	1	2	2.08
Agronomy & Soil Science -Closed	9	7	1		8	88.89
American Studies	60	5	6		11	18.33
Animal Science - Part of HNFAS	16	7	1		8	50.00
Anthropology	86	14	15	12	46	53.49
Architecture	37	5			5	13.51
Art	36		20		20	55.56
Asian Studies	70	4	14		22	31.43
Astronomy	25	24			25	100.00
BioMedSci - Biochem & Biophys - Closed	2	2			2	100.00
BioMedSci - Genetics - Closed	4	2		1	3	75.00
BioMedSci - ID - Closed	5	5			5	100.00
BioMedSci - Pharmacology - Closed	2					
BioMedSci - Tropical Med. & Med. Micro.	5	2	2		4	80.00
BioMedSci -Cell & Molecular Biology	29	28			29	100.00
Botany	57	38	4		43	75.44
Business Administration	328	7	15		22	6.71
Business Administration - reopens F 03	12	6	1		7	58.33
Chemistry	33	31			32	96.97
Civil Engineering	67	26	4	2	34	50.75
Communication	46	3	8		11	23.91
Communication & Information Science	43	21	2		31	72.09
Counseling and Guidance	86	2	2	6	10	11.63
Cultural Studies (Graduate Certificate)	1					
Doctorate in Education	123	11	4		15	12.20
East Asian Languages & Literature	85	20	19	4	55	64.71
Economics	68	21	3	1	25	36.76
Educational Administration	99	1	3		17	17.17
Educational Foundations	72	1	4		5	6.94
Educational Psychology	61	3	3		6	9.84
Educational Technology	35	6	2		8	22.86
Electrical Engineering	65	32	1		34	52.31
English	74	25	4		29	39.19
Entomology - part of PEPS	8	4	1		5	62.50
European Languages & Literatures	29	21	2		23	79.31
Food Science - part of HNFAS	5	3	1		4	80.00
Geography	78	20	7	1	36	46.15
Geology and Geophysics	50	41	1		42	84.00
History	82	21	9	6	39	47.56
Horticulture - closed - now part of TPSS	18	10			10	55.56
Information & Computer Sciences	63	34	2		36	57.14
Kinesiology & Leisure Sciences	40	5			5	12.50
Library & Information Sciences	109	1	8		9	8.26
Linguistics	67	26	7	2	42	62.69
Mathematics	21	12	5		17	80.95
Mechanical Engineering	18	14			14	77.78
Meteorology	40	36	2		38	95.00

Table 1 (continued)

Program	Enroll	GA	TW	Fellow.	Total	Percent
Microbiology	28	24	1		25	89.29
Mol. BioSci & BioEngineering - BioEng.	15	11			12	80.00
Mol. BioSciences & BioEngineering	34	30	2	1	33	97.06
Music	41	13	3	1	17	41.46
Natural Resource & Environ. Manage.	15	3	1		9	60.00
Nursing	88		9		14	15.91
Nutritional Science - Part of HNFAS	16	9	2		11	68.75
Ocean & Resource Engineering	24	13	1	1	15	62.50
Oceanography	57	50	1	1	53	92.98
Pacific Islands Studies	34	6	2	10	22	64.71
Philosophy	50	18	5		23	46.00
Physics	24	20	1		21	87.50
Physiology	20	3	2		5	25.00
Plant Pathology - part of PEPS	13	10	1		12	92.31
Political Science	135	17	14		31	22.96
Population Studies (Graduate Certificate)	2					
Psychology	95	48	11		59	62.11
Public Administration	50		1		1	2.00
Public Health	38	4	8		12	31.58
Religion	9	8			8	88.89
Second Language Acquisition	128	49	25		74	57.81
Social Work	242	11	8	11	56	23.14
Sociology	67	17	8		34	50.75
Special Education	51	2	1		3	5.88
Speech	17	9	2		12	70.59
Speech Pathology & Audiology	86	3	8		11	12.79
Teacher Ed. & Curriculum Studies	192	3	5		8	4.17
Telecom., Info., & Resource Management	2					
Theatre & Dance	57	13	18	1	33	57.89
Travel Industry Management	21		3		3	14.29
Tropical Plant & Soil Science	10	6	1		7	70.00
Urban & Regional Planning	57	14	6	1	28	49.12
Zoology	76	56	1	3	60	78.95
Total	4,259	1,077	335	66	1,606	37.71

Table 2 - Number of students in Masters' programs with support, Fall 2002

Program	Enroll	GA	TW	Fellow.	Total	Percent
Accounting	96		1	1	2	2.08
Agronomy & Soil Science - Closed	5	3	1		4	80.00
American Studies	27	1	5		6	22.22
Animal Science - Part of HNFAS	16	7	1		8	50.00
Anthropology	43	10	12	8	34	79.07
Architecture	5	1			1	20.00
Art	36		20		20	55.56
Asian Studies	70	4	14		22	31.43
BioMedSci - Genetics - Closed	1	1			1	100.00
BioMedSci - ID - Closed	1	1			1	100.00
BioMedSci - Tropical Med. & Med. Micro.	1		1		1	100.00
BioMedSci -Cell & Molecular Biology	8	7			8	100.00
Botany	34	24	3		27	79.41
Business Administration	328	7	15		22	6.71
Chemistry	16	15			15	93.75
Civil Engineering	56	18	4	2	26	46.43
Communication	46	3	8		11	23.91
Counseling and Guidance	85	2	2	6	10	11.76
East Asian Languages & Literature	37	7	10	2	20	54.05
Economics	10		2		2	20.00
Educational Administration	99	1	3		17	17.17
Educational Foundations	72	1	4		5	6.94
Educational Psychology	35	2			2	5.71
Educational Technology	35	6	2		8	22.86
Electrical Engineering	51	23	1		24	47.06
English	44	11	4		15	34.09
Entomology - part of PEPS	4	3	1		4	100.00
European Languages & Literatures	29	21	2		23	79.31
Food Science - part of HNFAS	5	3	1		4	80.00
Geography	48	15	5		25	52.08
Geology and Geophysics	21	18			18	85.71
History	33	12	3		16	48.48
Horticulture - closed - now part of TPSS	7	4			4	57.14
Information & Computer Sciences	51	27	2		29	56.86
Kinesiology & Leisure Sciences	40	5			5	12.50
Library & Information Sciences	107	1	8		9	8.41
Linguistics	16	3	4		7	43.75
Mathematics	6	2	3		5	83.33
Mechanical Engineering	10	8			8	80.00
Meteorology	18	15	2		17	94.44
Microbiology	21	18	1		19	90.48
Mol. BioSci & BioEngineering - BioEng.	15	11			12	80.00
Mol. BioSciences & BioEngineering	13	9	2	1	12	92.31
Music	24	4	3	1	8	33.33
Natural Resource & Environ. Manage.	6	1	1		3	50.00
Nursing	59		6		10	16.95
Nutritional Science - Part of HNFAS	16	9	2		11	68.75

Table 2 (continued)

Program	Enroll	GA	TW	Fellow.	Total	Percent
Ocean & Resource Engineering	13	4	1	1	6	46.15
Oceanography	19	15	1		16	84.21
Pacific Islands Studies	34	6	2	10	22	64.71
Philosophy	14	6			6	42.86
Physics	6	5			5	83.33
Physiology	13	1			1	7.69
Plant Pathology - part of PEPS	5	3	1		4	80.00
Political Science	44	2	6		8	18.18
Psychology	45	33	5		38	84.44
Public Administration	48		1		1	2.08
Public Health	33	4	8		12	36.36
Religion	8	8			8	100.00
Second Language Acquisition	104	33	25		58	55.77
Social Work	226	10	7	8	48	21.24
Sociology	17	4	2		7	41.18
Special Education	51	2	1		3	5.88
Speech	17	9	2		12	70.59
Speech Pathology & Audiology	86	3	8		11	12.79
Teacher Ed. & Curriculum Studies	192	3	5		8	4.17
Theatre & Dance	43	12	17	1	31	72.09
Travel Industry Management	20		2		2	10.00
Tropical Plant & Soil Science	8	5	1		6	75.00
Urban & Regional Planning	53	13	6		26	49.06
Zoology	28	19		1	20	71.43
Total	2,933	544	260	42	920	31.37

Table 3-Number of Students in doctoral programs with support, Fall 2002

Program	Enroll	GA	TW	Fellow.	Total	Percent
Agronomy & Soil Science - Closed	4	4			4	100.00
American Studies	29	4	1		5	17.24
Anthropology	43	4	3	4	12	27.91
Astronomy	25	24			25	100.00
BioMedSci - Biochem & Biophys - Closed	2	2			2	100.00
BioMedSci - Genetics - Closed	3	1		1	2	66.67
BioMedSci - ID - Closed	4	4			4	100.00
BioMedSci - Pharmacology - Closed	2					
BioMedSci - Tropical Med. & Med. Micro.	4	2	1		3	75.00
BioMedSci -Cell & Molecular Biology	21	21			21	100.00
Botany	23	14	1		16	69.57
Business Administration - reopens F 03	12	6	1		7	58.33
Chemistry	17	16			17	100.00
Civil Engineering	9	8			8	88.89
Communication & Information Science	43	21	2		31	72.09
Doctorate in Education	123	11	4		15	12.20
East Asian Languages & Literature	48	13	9	2	35	72.92
Economics	58	21	1	1	23	39.66
Educational Psychology	26	1	3		4	15.38
Electrical Engineering	14	9			10	71.43
English	30	14			14	46.67
Entomology - part of PEPS	4	1			1	25.00
Geography	30	5	2	1	11	36.67
Geology and Geophysics	26	23			23	88.46
History	49	9	6	6	23	46.94
Horticulture - closed - now part of TPSS	11	6			6	54.55
Information & Computer Sciences	12	7			7	58.33
Linguistics	51	23	3	2	35	68.63
Mathematics	15	10	2		12	80.00
Mechanical Engineering	8	6			6	75.00
Meteorology	22	21			21	95.45
Microbiology	7	6			6	85.71
Mol. BioSciences & BioEngineering	21	21			21	100.00
Music	17	9			9	52.94
Natural Resource & Environ. Manage.	9	2			6	66.67
Nursing	27		3		4	14.81
Ocean & Resource Engineering	11	9			9	81.82
Oceanography	38	35		1	37	97.37
Philosophy	36	12	5		17	47.22
Physics	18	15	1		16	88.89
Physiology	7	2	2		4	57.14
Plant Pathology - part of PEPS	8	7			8	100.00
Political Science	91	15	8		23	25.27
Psychology	48	15	6		21	43.75
Public Health - DRPH Closed	4					
Second Language Acquisition	19	14			14	73.68
Social Work	16	1	1	3	8	50.00
Sociology	50	13	6		27	54.00

Table 3 (continued)

Program	Enroll	GA	TW	Fellow.	Total	Percent
Theatre & Dance	14	1	1		2	14.29
Tropical Plant & Soil Science	2	1			1	50.00
Urban & Regional Planning (New doctoral program)	3	1		1	2	66.67
Zoology	48	37	1	2	40	83.33
Totals	1,262	527	73	24	678	53.72