

College of Arts and Sciences Department of Earth & Atmospheric Sciences

Senate Bill No.: 0708-09

UNIVERSITY SENATE

UNIVERSITY AT ALBANY STATE UNIVERSITY OF NEW YORK

Introduced by: Graduate Academic Council

University Planning and Policy Council

Date: November 2, 2007

PROPOSAL TO SUSPEND GRADUATE ADMISSIONS IN GEOLOGICAL SCIENCES

IT IS HEREBY PROPOSED THAT THE FOLLOWING BE ADOPTED:

- 1. That the University Senate approves the attached Proposal, as approved by College of Arts and Sciences on April 30, 2007, the University Planning and Policy Council on October 5, 2007 and the Graduate Academic Council on October 18, 2007.
- 2. That this proposal be forwarded to the President for approval.



College of Arts and Sciences Department of Earth & Atmospheric Sciences

APPROVED BY CAS ACADEMIC PROGRAMS COMMITTEE, LESLIE HALPERN CHAIR 04/27/07

APPROVED BY CAS DEAN JOAN WICK-PELLETIER 04/30/07

MEMORANDUM

TO: JOAN WICK-PELLETIER, DEAN, COLLEGE OF ARTS AND SCIENCES

FROM: VINCENT P. IDONE, CHAIR

SUBJECT: RECOMMENDATION FOR SUSPENSION OF ADMISSION TO THE GRADUATE

PROGRAM IN GEOLOGICAL SCIENCES

DATE:

CC:

As you are no doubt well aware, the situation with regard to the Geological Sciences Graduate Program here in Earth and Atmospheric Sciences is critical. Actually, *sub*critical would be a better characterization. On paper, this is still a doctoral degree granting program consisting of but four formal faculty members: John Arnason (Assistant), John Delano (Distinguished Teaching), William Kidd (Full), and Brad Linsley (Associate). Note that it is generally thought that ten is the typical number of faculty members appropriate for a doctorate-granting geology program at a major university. This is a telling statistic.

Indeed, with the confluence of the recently undertaken campus-wide review of doctoral stipends and the DEAS "Self-Study" underway for assessment, the status of the Geological Sciences Program has been brought into stark relief. To be honest, many of us here in DEAS have known for quite a while that the situation was poor and that it just could not go on. But it is human nature to "go with the status quo" until change is forced upon you externally or until the depth of self-awareness rises to the point that change is embraced spontaneously and willingly. We've arguably undergone the latter experience.

In fact, the essence of the situation relative to the current status of the program (regardless of how it got to this point, which is a two-decade long sad and painful story), is captured in the tables below which compare the application and admission statistics for the last several years between the Atmospheric Science Program and the Geological Sciences Program (These are actually Tables 5 and 6 of our recently submitted Self-Study document.):

 $\it Table~5$. GPA and GRE Scores for Applicants, Admits, and Enrolled Students

Atmospheric Sciences M.S.

Applied			Admitted			Enrolled			
Year	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA
Fall 2002	487	682	3.28	495	718	3.43	499	699	3.45
Fall 2003	501	727	3.43	495	742	3.59	479	742	3.64
Fall 2004	515	681	3.35	562	730	3.68	520	760	3.73
Fall 2005	487	676	3.36	510	733	3.75	453	713	3.81
Fall 2006	476	674	3.49	513	673	3.75	420	650	3.46
5-yr mean	493	688	3.38	515	719	3.64	474	713	3.62

Atmospheric Sciences Ph.D.									
	Applied Admitted			Enrolled					
Year	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA
Fall 2002	574	774	3.38	588	750	3.48	525	730	3.65
Fall 2003	602	769	3.70	601	777	3.98	550	747	3.98
Fall 2004	523	748	3.73	531	740	3.73	530	734	3.79
Fall 2005	526	741	3.64	519	733	3.67	450	707	3.74
Fall 2006	513	757	3.52	553	750	3.62	568	750	3.47
5-yr mean	548	758	3.6	558	750	3.69	525	734	3.73
			Geolo	gical Sci	ences M.S	5.			
		Applied		P	Admitted		Enrolled		
Year	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA
Fall 2002									
Fall 2003	450	607	2.72	450	607	2.72	450	595	2.72
Fall 2004	538	683	2.92	527	653	2.96	560	685	2.68
Fall 2005	450	659	3.36	450	616	3.36	450	780	n/a
Fall 2006	520	608	3.20	520	608	3.20	520	590	2.5
5-yr mean	490	640	3.05	487	621	3.06	495	662	2.63
	,		Geolo	gical Scie	ences Ph.	D.			
		Applied		l A	Admitted		Enrolled		
Year	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA	GRE-V	GRE-Q	GPA
Fall 2002	490	490							
Fall 2003	430	550	3.29	430	550	3.29	430	550	3.29
Fall 2004	417	683	3.10	455	625	3.10	460	500	3.10
Fall 2005	457	617	2.75	457	617	2.75	460	610	2.78
Fall 2006	440	785	n/a	440	785	n/a	n/a	n/a	n/a
5-yr mean	447	625	3.05	445	644	3.05	450	553	3.06

 $\it Table~6$. Graduate Program Admissions

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Atmospheric Sciences MS

Year	Applied	Admitted	% Admitted	Enrolled
2001	19	8	44	1
2002	32	16	50	8
2003	31	12	39	8
2004	33	8	24	1
2005	48	5	10	5
5-year mean	33	10	33	5

Geological Sciences MS

Year	Applied	Admitted	% Admitted	Enrolled
2001	1	1	100	0
2002	8	6	75	4
2003	4	4	100	3
2004	5	4	80	3
2005	7	5	71	1
5-year mean	5	4	85	2

Atmospheric Sciences Ph.D.

Year	Applied	Admitted	% Admitted	Enrolled
2001	15	6	40	3
2002	22	5	23	2
2003	25	8	32	4
2004	14	6	43	5
2005	29	15	52	7
5-year mean	21	8	38	4

Geological Sciences Ph.D.

Year	Applied	Admitted	% Admitted	Enrolled
2001	1	1	100	1
2002	1	1	100	1
2003	1	1	100	1
2004	3	2	67	1
2005	3	3	100	2
5-year mean	1.8	1.6	93	1

In examining this data, it is clear that the Geological Sciences program has minimal application rates and a nearly 100% acceptance rate. These are poor indicators.

With such manifest evidence and your own timely inquiry as to the appropriateness of admitting new doctoral students in the current round of graduate recruitment, we met on January 22nd to consider the facts and the options available to us. It was decided via a formal vote of the faculty (10-1 in favor; 11-1 if you include me) to recommend suspension of admission of students to the graduate program of Geological Sciences. In essence, it was argued that the majority (3 of 4) of the current Geological Sciences faculty could effectively continue their research and teaching endeavors within a subtrack or stream of the Atmospheric Science graduate program, the details of this to be worked out over the coming months. I and many others here are totally convinced that this can work and actually lead to a much improved situation.

The issue of the cohort of current students needing to complete their degrees is readily addressed. As no faculty member will lose his position, those same faculty members will be here to continue their research and guide these students to completion of their degrees. There are, in fact, only eight students. The breakdown with estimated completion time for each is as follows:

Spring '07 TA's	Spring '07 TA's Degree		Future TA Support		Likely graduation	
Kritcheff		MS		1 year		Spring 08+
Langton	MS		?		Spring ()7
Neumann		MS		1 year		Spring 08+
Marsellos		PhD		1 year		Spring 09+
Montario		PhD		1 year		Spring 09+
Zhang		MS		0		Spring 07+
Lim		PhD (Al	BD)	0		Spring 07
Gillen		BS/MS		2 years		Spring 09

The requisite courses for processing out these students will not be an issue, as most have already completed the few such courses required. Other courses entailed will still be made available. In essence, assuming the suspension of admission is approved to take effect this coming fall, the full cohort of students should be processed out in two years. One student who previously would have been in this group (H. Wu) has already opted to complete an atmospheric science degree. S. Langton is currently deciding whether to stay on for her doctorate or attend a different institution. Should she decide to stay, she would represent the only student for which degree completion would definitely take three or more years.

It should be noted that there will continue to be Geological Sciences courses offered, especially on the undergraduate level. The ending of admission to the graduate program does not mean that all geology will be eliminated from the curriculum. Various geology courses will be offered as a component of the environmental sciences degree, and some my actually continue with the GEO designation, or both GEO and ENV designations. Examples include ENV/GEO 201, 230, 250, 350, 435, 450, and 466. Consequently, we do not see this as having any serious effect on the coursework required for students pursuing a master's degree in education and teaching certification in the School of Education, for example, and certainly not in the near term as we process out the current geology undergraduates and graduate students over the next couple of years.

We have yet to work out the details of what will be the exact format and graduate curriculum of the "environmentally focused" transition of the former program. In essence, we will leverage the current strength and stature of the Atmospheric Science program to build outward into areas that will expand and

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complement this program. Specializations which naturally intersect both disciplines and which are highly environmental include hydrology/hydrometeorology, climate dynamics and paleo-climate, and numerical modeling of any number of geophysical systems. Further down the road, creation of a formal graduate program in environmental science could be an option, especially if the pool of resources improves for UA or if other trends argue for the suitability of considering this. Regardless, many here believe that a name change is in order for the department; one often suggested is "Atmospheric and Environmental Sciences." So, we would go from DEAS to DAES. (At least we would no longer have our acronym confused with East Asian Studies.)

We are confident that in cooperation with your office, we can effect a transition that allows the remaining Geological Sciences faculty and the overall program to gain new momentum and move ahead. This should not be considered an end, but really, a new beginning.

We hope too that governance will appreciate the basis for our request and confirm our recommendation so that we can actively move on from here.