



July 21, 2011

To: University Curriculum Committee
From: Dr. Russell Herman
Re: Consolidation of Physics & Physical Oceanography and Geology & Geography

At 6:00 P.M. on Wednesday July 13, 2011 the faculty and staff of the Departments of Physics & Physical Oceanography and Geology & Geography received an email from Dean Cordle indicating that

“Effective January 1, 2012, the Department of Physics and Physical Oceanography will merge with the Department of Geography and Geology as a single department under the leadership of department chair Lynn Leonard.”

It was further noted,

“Please note that this is not an elimination of academic programs, but rather a change in the administrative structure through which the programs are offered. The savings will come from the elimination of the department chair position in Physics & Physical Oceanography and one staff position in Geography & Geology. No other reductions in the two departments’ resources are involved.”

This was the first that the faculty and staff knew of the impact of the recent budget cuts on the departments. I was made aware of this decision the day before. As soon as the news came out, the mood in the department changed and planning for the upcoming academic year were put on hold in order to address this decision. On July 13, at a meeting with the Dean, the two chairs were asked to schedule separate meetings with the Dean and afterwards begin to work on the details for consolidation of the departments.

The Faculty Senate Steering Committee met with the Dean on July 14 and agreed “to forward the merger announcement to the university curriculum committee to report their findings to the senate.” It is clear that the administration did not bring a consolidation proposal to the University Curriculum Committee before going forward with its announcement.

The Department approved the following general statement voicing that we are concerned with the decision that was made and that it was done without consultation of the departments as to the impact on the departments and even if it could work.

“Yesterday Dean Cordle announced that the Departments of Physics & Physical Oceanography and Geography & Geology will be merged into one. In all of the Open Forums discussing budget reductions this *specific* scenario was never presented. We feel the need to alert the Faculty Senate of this development. Also, there was no consultation with the Chairs of either department as to their suggestions on how to save money. It is unclear to members of the Department of Physics & Physical Oceanography how this very small contribution to the budget reduction warrants the resulting detrimental impact on science education at our University. We will begin the process of soliciting support from the larger Physics Community to help us develop a formal response.”

A quorum of faculty members of the Department of Physics and Physical Oceanography met on Monday, July 18 to discuss the events that had transpired and how we wanted to respond. While the Department recognizes the severity of the budget cuts and would like to make some contribution, the idea of an indefinite consolidation of departments, especially without any significant planning, would impact areas such as instruction, programs, and research in both departments. This consolidation could negatively impact the physical oceanography program which has just begun. We are in agreement on the following points and plan to prepare documentation supporting our position.

- The Department of Physics and Physical Oceanography wants to challenge the decision. This is a natural reaction and is not a reflection on the Department of Geology and Geography or on its chair.
- The Department of Physics and Physical Oceanography will be putting together a detailed response indicating how the elimination of the department is more than just an administrative cut and would affect our physics programs and the university.
- Since preparing a case for the Curriculum Committee while simultaneously planning a merger is time-consuming, counterproductive, and interferes with normal activities (teaching, preparation, research, promotion of program, implementation of University Studies implementation, SACS, etc.), we propose
 - That another solution be sought to the budget issue which is at the root of this decision. The proposed contribution to the cuts for Jan 1-July 1, 2012 is on the order of \$30K. There might be ways to come up with a fraction of this while the discussions take place.
 - To postpone the planning stage until Spring 2012 in the event that the Curriculum Committee approves the planning process sometime this Fall.
 - To postpone the proposed date of a potential merger until July 1 instead of Jan 1. This would give time for defending our position and giving the Curriculum Committee time to review our materials while maintaining everyday operations in each department.

We believe that the proposed consolidation would negatively impact physics at UNCW. Some of these impacts are

- The amount saved is not worth the impact on the physics programs.
- Impact on the program
 - The visibility of physics will be decreased.
 - Our ability to attract the best faculty and students will be decreased.
 - We ranked in the top 22% in graduation rates among over 500 universities with Bachelors-only physics departments for 2006-2008.¹
 - Two-thirds of departments, whose highest physics degree is a master's, had graduate rates less than ours.
 - We also rank well as a Bachelors-only physics department in North Carolina as shown at the end of this letter.
- Compatibility of Departments
 - There is little in common between the two departments. This would make it difficult for one person to understand the curriculum and research needs of the other group.
 - The proposal is to have two Administrative Associates do the work of four covering the needs of these two departments and pre-engineering, whose Administrative Associate recently retired.
 - Eventually, there will be a need for more administration like any other department of the size of the proposed department, such as an assistant chair, or undergraduate coordinators for the separate programs.
 - The workload on the chair will increase.
 - Thirty years ago Chemistry and Physics were under one chair. There were separate meetings of the “divisions” and they never met as one department. The chair had double the work and it became “unwieldy”.
- Physical Oceanography
 - It will hurt physical oceanography and the plans to grow this option.
 - Entrance requirements for top physical oceanography graduate programs require three years of physics and bright students would not go to a school that does not have a distinct physics program.
- Impact on Students
 - Students will not get the same attention as they get now.
 - Instruction will be affected as noted below.
 - The number of majors will decrease
- Impact on Faculty
 - It affects faculty morale.
 - It will have significant impact on our ability to attract external funds. As a result, it would reduce the indirect cost contributions to the university.
 - It could affect working with professional organizations, including service, publication, and professional reviewing.

¹ See the end of this letter for data on graduation rates. Additional material can be provided later.

- Faculty are concerned about being evaluated by someone who does not understand the discipline.
- Instruction and research will be affected as more of the administrative work will be passed to faculty due to the staff reduction and increased load on the chair. This would especially be true of the programs being absorbed as they would know more about their discipline than the chair.
- Impact on UNCW
 - Fewer than ten Physics & Geology departments were found on the first several pages of a Google search. These are not at the caliber of UNCW.
 - This action would cast a shadow on the new Chancellor due to the precedent set at Wichita State University (i.e., the consolidation of their Physics Department with Mathematics).
 - This could bring unwanted attention to UNCW.
- These and enforced enrollment caps will eventually lead to the loss of physics degrees at a Comprehensive I University.

We are willing to provide a more detailed response with supporting materials indicating why we feel this is not a good idea in the long run and that there should be other ways to absorb budget cuts through administrative cuts. Consolidation of smaller departments into larger departments leads to an inherent loss of identity. Unintended consequences of such mergers are: loss of visibility; students will less likely major in the field; it would be difficult to attract good faculty; the chair of the merged department would not be able to promote all of the activities necessary to the health of the academic programs. These factors need to be taken into the proposed cost savings.

Sincerely,

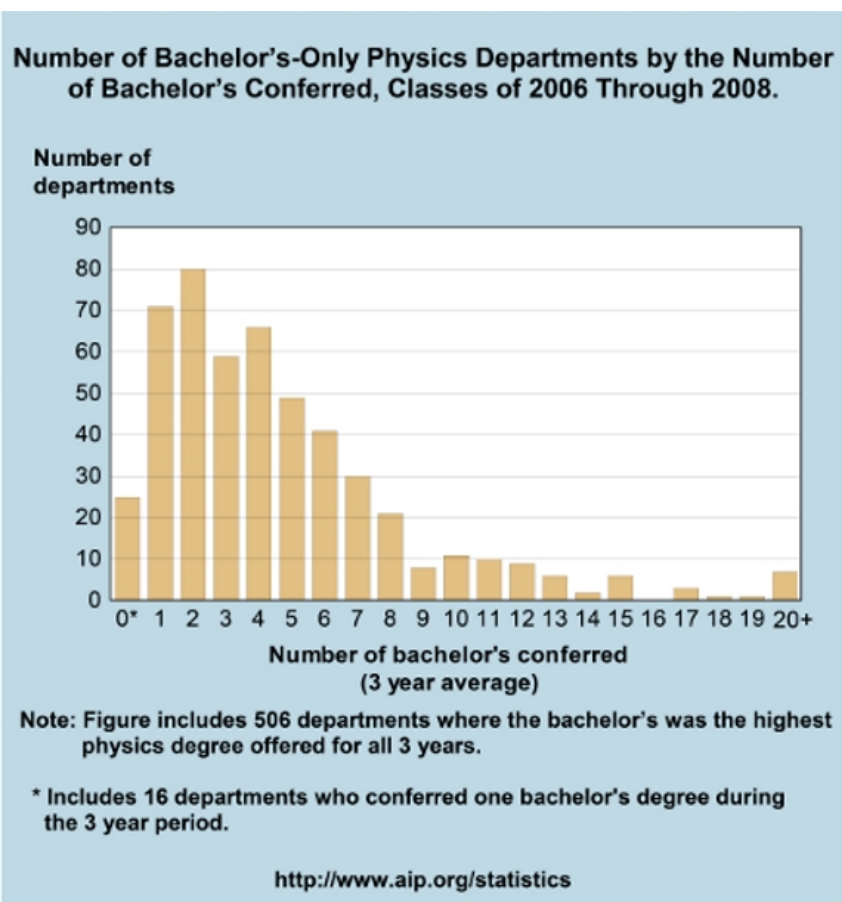


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Department of Physics & Physical Oceanography – Graduate Rates

UNCW first began offering the B.S. and B.A. degrees in physics in 1972. In 1998 the Department of Physics was renamed the Department of Physics & Physical Oceanography and has continued to offer baccalaureate degrees in physics. In Fall 2010 the department began offering a physics degree with an option in physical oceanography, which is getting some attention.

During the past decade the department has grown, and ranks high among those institutions granting only bachelor degrees in physics. The small size of the UNCW Physics Department is no anomaly. The American Institute of Physics (AIP) publishes data on enrollment and graduation data from departments across the country. Results for the 2008 Survey of Enrollments and degrees, published May 2011, indicated that 70% of physics departments offering the bachelor's as their highest degree average five or fewer degrees a year. Out of 506 departments, about 113 graduated more than we have at UNCW. In recent years we have graduated 8 (2008-2009), 10 (2009-2010), and 8 (2010-2011), which is even higher than was covered in the survey.



Furthermore, looking at data provided by AIP, UNCW ranks well within North Carolina. The data below supports that.

Comparisons with NC Schools Reporting 1998-2009

	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	
ASU	13	27	14	14	11	14	7	12	11	3	9	11	M
Davidson	4	8	5	7	4	4	7	4	3	3	4	14	
Duke	15	14	18	15	12	17	19	9	11	10	7	16	P
ECU	3	3	9	5	3	7	2	4	7	9	9	7	P
ECSU	3	1		0	1	1	3	0	0	0	1	0	
Elon U	6	7	8	5	1	2			3	3	1	2	
Guilford	6	2	2	7	5	2	7	5	2	5	4	5	
Lenoir-Rhyne		1	2	1	2	1	1	1	3	0	0	2	
NC A&T	8	9	2	2	8	3	2	6	4	4	1	5	M
NCCU	2	4	2	3	2	2	1	6	5	0	4	5	M
NC State	40	27	24	14	16	23	16	22	18	15	8	10	P
UNC Asheville	4	9	2	5	3	2	3	7	0	6	1	5	
UNC	21	17	17	9	17	20	7	6	8	11	5	12	P
UNCCH		8	12		4	5	3	4	4	9	4	5	M
UNCG	4	3	3	2	5	2	3	2	3	8	0	3	
UNCW	8	6	6	7	4	7	4	4	5	9	9	8	
Shaw		0			3	0	2	1		4			
Wake Forest	12	13	13	5	8	8	8	9	9	5	11	8	P
WCU									2	4	0	3	

AIP Degree Data - Bachelor Only 2004-2009

