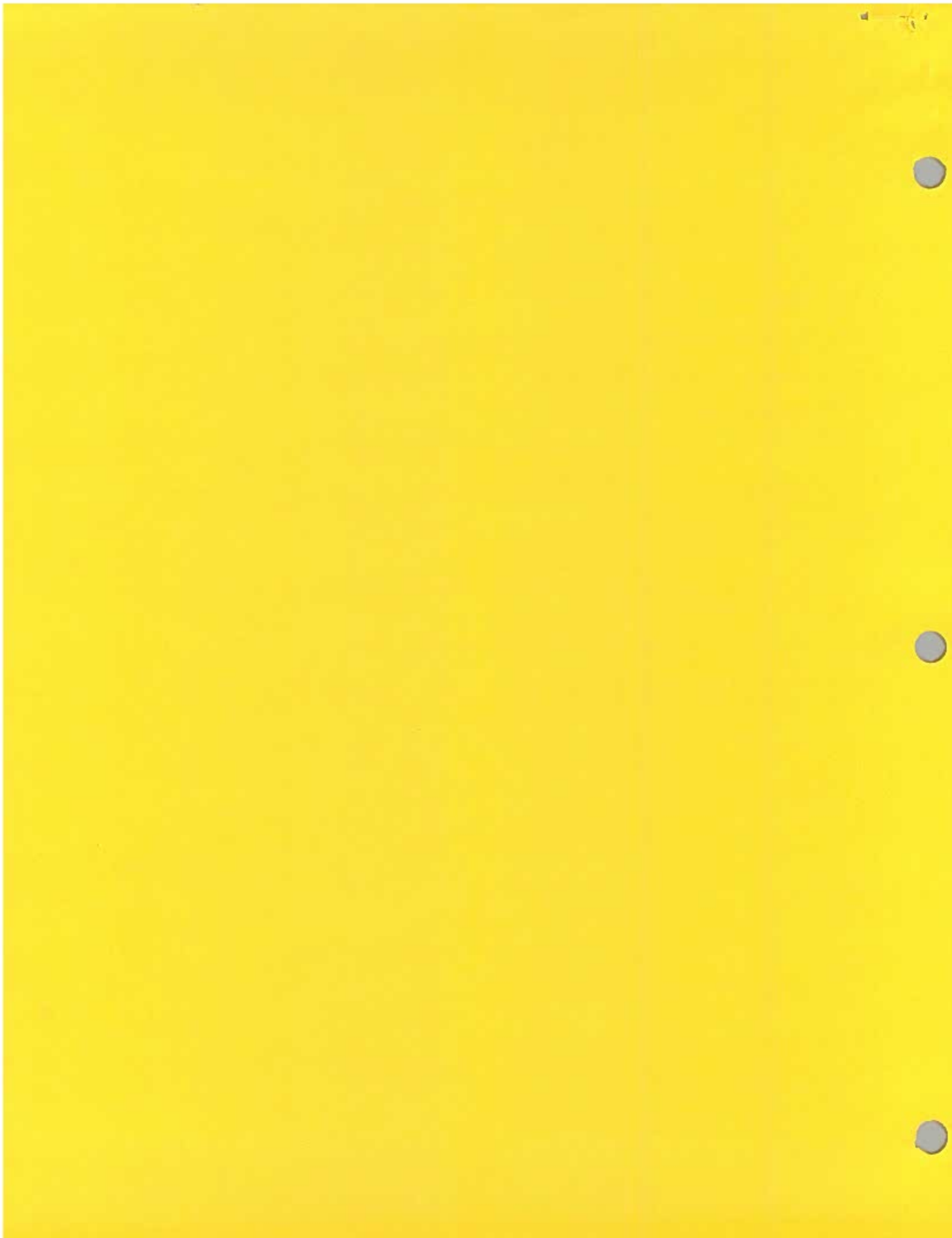


UNIVERSITY FACULTY SENATE

SUMMARY OF AGENDA

November 2, 1987

- I. ADOPTION OF THE AGENDA
- II. APPROVAL OF THE MINUTES: October 5, 1987
- III. REMARKS BY PRESIDENT JONES and/or PROVOST CAMPBELL
- IV. ANNOUNCEMENTS
 1. Senate President Toensmeyer
- V. NEW BUSINESS
 - A. Recommendation for permanent status of the Doctor of Philosophy degree in Oceanography
 - B. Recommendation for provisional approval of a Master of Science degree program in Economics
 - C. Recommendation for the establishment of a Film Subcommittee
 - D. Recommendation altering the charge to the Committee on Cultural Activities and Public Events
 - E. Introduction of new business





University of Delaware

UNIVERSITY FACULTY SENATE
301 HULLIHEN HALL
NEWARK, DELAWARE 19716

(302) 451-2921

October 19, 1987

TO: All Faculty Members

FROM: Carol Vukelich, Vice President *C. Vukelich*
University Faculty Senate

SUBJECT: Regular Faculty Senate Meeting, November 2, 1987

In accordance with Section IV, paragraph 6 of the Constitution, the regular meeting of the University Faculty Senate will be held on Monday, November 2, 1987 at 4:00 p.m. in room 110 Memorial Hall.

AGENDA

- I. Adoption of the Agenda.
- II. Approval of the minutes of the Senate meeting of October 5, 1987.
- III. Remarks by President Jones and/or Provost Campbell.
- IV. Announcements
 1. Senate President Toensmeyer
- V. New Business
 - A. Recommendation from the Committee on Graduate Studies (L. Lemay, Chairperson), with the concurrence of the Coordinating Committee on Education (H. Hall, Chairperson), for permanent status of the Doctor of Philosophy degree (Ph.D.) in Oceanography. (Attachment 1) [Provisional approval was given for four years on April 12, 1982.]

RESOLVED, that the Faculty Senate approves and recommends to the Board of Trustees that the Doctor of Philosophy degree (Ph.D.) in Oceanography be granted permanent status.
 - B. Recommendation from the Committee on Graduate Studies (L. Lemay, Chairperson), with the concurrence of the Coordinating Committee on Education (H. Hall, Chairperson), for provisional approval of the Master of Science degree (MS) program in Economics. (Attachment 2)

RESOLVED, that the Faculty Senate approves provisionally a new Master of Science degree (MS) program in Economics, effective on the date of Senate approval, with review for permanent status to occur in the fourth full year of the program.

- C. Recommendation from the Committee on Committees (F. Dilley, Chairperson) for the establishment of a Film Subcommittee.

RESOLVED, that the Bylaws and Regulations of the University Faculty Senate, III: "Standing Committee System of the Faculty and its Senate," be amended by the addition (on p. I-20 of the present Faculty Handbook) of the following:

FILM SUBCOMMITTEE

This subcommittee shall exchange ideas and information and contribute to the balance of Newark campus film programs generally, and specifically sponsor, direct, suggest or coordinate presentations of cultural films at the University.

The subcommittee shall consist of three faculty members chosen for two-year terms, one of whom shall be designated chairperson; one designee of the Provost appointed annually; one designee of the Director of the Office of Instructional Technology appointed annually; one undergraduate student and one graduate student appointed annually. Initial faculty terms on the subcommittee shall be staggered so that at least one faculty member carries over each year.

- D. Resolution from the Committee on Committees (F. Dilley, Chairperson) altering the charge to the Committee on Cultural Activities and Public Events.

RESOLVED, that the charge to the Committee on Cultural Activities and Public Events as it appears in Section III, pages I-17 and I-17a, paragraphs 1 and 3, of the Faculty Handbook be changed to read:

It should be the objective of the Cultural Activities and Public Events committee together with its subcommittees, Fine Arts and Exhibitions, Film¹, Performing Arts, and Visiting Scholars and Speakers, to foster, encourage and coordinate throughout the University programs of local, national, and world significance that illuminate, explain, articulate, or are a creative part of the cultures of mankind. The committee shall work with any and all agencies of the University specifically to sponsor, direct, or advise on programs which bring to the University notable and creative figures in scholarship, presentations, art exhibits, and

¹Creation of new subcommittee.

media productions, or any presentation which reflects upon the University's obligation to foster and contribute to the cultural life of the community and the world.

The Cultural Activities and Public Events Committee shall consist of: Seven faculty members, one² being a chairperson, the four³ chairpersons of the subcommittees, and one faculty member from each subcommittee as elected by the several subcommittees; one appointment by the Provost; one appointment by the Vice President for Student Affairs; three undergraduate students; and one graduate student.

- E. Such items as may come before the Senate. (No motion introduced at this time may be acted upon until the next meeting of the Senate.)

rg

Attachments: Committee Activities Report

1. Ph.D. degree in Oceanography
2. MS degree in Economics

²Word added for clarification.

³Formerly "three."



COMMITTEE ACTIVITIES REPORT

ACADEMIC APPEALS, COMMITTEE ON (Gordon DiRenzo)

One case pending.

ACADEMIC CEREMONIES, COMMITTEE ON (C. Roy Rylander)

No activity to report at this time.

ACADEMIC COMPLAINTS, COMMITTEE ON (Jack Gelb)

No committee activities at this time.

ACADEMIC FREEDOM, COMMITTEE ON (Christopher Boorse)

No pending issues.

BEVERAGE ALCOHOL, COMMITTEE TO REGULATE THE USE OF (James Fischer)

No pending issues.

COMMITTEES, COMMITTEE ON (Frank Dilley)

Meeting once a month to fill vacant positions on various committees. Volunteers for such positions are always welcome.

COMPUTER COMMITTEE (David Usher)

Nothing scheduled pending clarification of committee function.

CULTURAL ACTIVITIES AND PUBLIC EVENTS, COMMITTEE ON (Frank Dilley)

Committee meets only on call to consider questions of budget allocation and expenditure. Currently it is reviewing a request for funding of a film series and a recommendation from the Committee on Committees to establish a fourth subcommittee (on films).

EDUCATIONAL INNOVATION AND PLANNING, COMMITTEE ON (Gary Laverty)

Nothing pending.

FACULTY WELFARE AND PRIVILEGES, COMMITTEE ON (Paul Sammelwitz)

1. Consideration of recommendation to include questions related to sex discrimination on course evaluation forms.
2. Recommendations regarding amorous relationships policy.
3. Development of guidelines for faculty appeal process.

INSTRUCTIONAL RESOURCES, COMMITTEE ON (Robert Taggart)

Discussion of committee's charge over areas of instruction on campus.

LIBRARY COMMITTEE (Evelyn Hayes)

Nothing pending.

NOMINATING COMMITTEE (Michael F. Pohlen)

No committee activity this month.

PERFORMING ARTS SUBCOMMITTEE (Allen M. Granda)

No action pending.

RULES, COMMITTEE ON (James L. Morrison)

Formulating preliminary plans for reapportionment.

UNDERGRADUATE ADMISSIONS AND STANDING, COMMITTEE ON (Anne Clark)

No items pending.

UNDERGRADUATE STUDIES, COMMITTEE ON (Paul Durbin)

Discussing:

1. Project Vision and plans for undergraduate education.
2. Implementation of multicultural course requirement.
3. Continuation of drop/add issues.
4. Double majors.
5. Honors vs. non-honors courses: clarification.
6. 400-600 cross listing.
7. Changes in curricula (7 proposals currently).
8. Course changes, fall cycle.

Doctor of Philosophy (Ph.D.) Program in Oceanography
College of Marine Studies
University of Delaware

Formation of the Oceanography doctoral program

The College of Marine Studies (CMS) of the University of Delaware established a doctoral program in Oceanography in 1981. It combined academic elements in chemical, physical, geological, and biological oceanography to offer a coherent program in oceanography at the doctoral level.

The Program provides fundamental training in physics, chemistry, biology, and geology, and trains graduate students as practicing research oceanographers. It serves as a focal point for the use of the field-going, experimental, and modeling resources available to the College. These include the coastal research vessel Cape Henlopen, a salinity-temperature-depth rosette sampling system, and a tilting wind-wave tank for controlled air-sea interaction experiments. The University's Academic Computing Services provides mainframe computers, an IBM 3081D and a DEC VAX 8600. A DEC Microvax-II, linked to other oceanographic research centers, is available in Lewes.

Research Interests

At the time of its creation, the Oceanography doctoral program emphasized coastal and estuarine oceanography. That focus remains strong. Recent faculty additions in 1985-86 (Drs. Wong, Miller, Pennock, Luther, and Ullman) have increased the estuarine and coastal research effort but have also expanded the area of interest into adjacent regions of the coastal plain, continental shelf, and slope.

An overview of current faculty research interests shows interdisciplinary studies of estuarine oceanography, combining the

Oceanography Ph.D.

study of circulation, chemistry, sedimentary geology, microbiology, and planktonic and benthic biology to form a holistic picture of basic estuarine processes.

Other areas of research include:

In biological oceanography: the dispersal and recruitment of larval fish and invertebrates; benthic ecology, studies of deposit-feeding biology and the interactions of fluid flow and sediment transport with benthic organisms.

In chemical oceanography: the cycling of trace metals, nutrients, and organic matter in salt marshes, estuaries, and the ocean; sulfur biogeochemistry in the marine environment; the chemistry of acid rains; algal physiology and the influence of algae and bacteria on the chemistry of seawater.

In geological oceanography: the distribution, chemistry and diagenesis of marine and marginal-marine sediments; the chemistry of freshwater (ground and surface) and sedimentary inputs to estuaries.

In physical oceanography include studies (including numerical models) of river and estuarine plumes and interactions on the continental shelf; the role of the oceans in climate variability; physical processes of momentum, heat, and mass transfers across the air-sea interface; breaking waves; bubbles in near-surface ocean and spray in the atmospheric surface layer.

The Academic Program

All advanced degree programs at CMS emphasize interdisciplinary graduate training. As can be seen from the academic requirements, the Oceanography Program continues this tradition. Oceanography doctoral students take core courses in all the oceanographic disciplines. As well, they choose from introductory courses in marine policy, applied ocean science, and marine biology-biochemistry.

As noted above, the Oceanography research program stresses interdisciplinary research, particularly in the Delaware Estuary. This attitude is one we try to convey to our graduate students.

Outlook for the future

Before the Oceanography degree program was established, all doctoral students in CMS were enrolled for a Ph.D. in Marine Studies. As is clear from the enrollment figures in the next

Oceanography Ph.D.

paragraph, the Ph.D. degree has enhanced the recruitment of oceanographic graduate students. This program growth will continue and likely accelerate with the additional impact of the new faculty hires that have taken place in the past two years.

Enrollment in the Oceanography Ph.D. Program began with a few students who had been enrolled in existing CMS programs and who elected to join the Oceanography Program. Since that time, the doctoral student body has been approximately as follows:

<u>Year</u>	<u>Oceanography</u>
1981-82	4
1982-83	6
1983-84	5
1984-85	7
1985-86	8
1986-87	14

Enrollment is likely to increase for the next few years, reaching a level of perhaps 20-25. This estimate is based on an average of about two Ph.D. students per faculty member. Assuming an average of about four years for completion, with some dropouts, this gives about six admissions per year.

The current student body is distributed among the four oceanographic disciplines as follows (note that it's sometimes hard to define the field rigidly):

biological	3
chemical	3
physical	8

Geological oceanography has always had low numbers, possibly because of a strong graduate program in the Geology Department. With the recent addition to the faculty of Drs. Ullman and Luther, the number of Ph.D. candidates in geological/geochemical oceanography is likely to increase.

ADMISSION REQUIREMENTS

Students will be admitted to the program by the process of competitive application. Entering students will be expected ordinarily to have earned the Master of Science or its equivalent in oceanography or the related fields of biology, chemistry, physics, geology, mathematics, or engineering. Many students will likely have obtained their masters degrees at Delaware; however, faculty in the program will actively recruit students from other institutions with M.S. degrees in appropriate science fields. Those entering with only a baccalaureate degree will first be accepted into the M.S. in Marine Studies (oceanography) program; however, after completing required introductory courses and performing exceptionally on a screening examination, they may be invited by vote of the Oceanography Program faculty to bypass the M.S. degree and proceed directly toward the Ph.D.

The admissions policy will otherwise be the same as that in effect for the present Marine Studies degrees. The appropriate section is reproduced here from the revised CMS Graduate Program Policy Statement:

The College generally adheres to a policy of accepting only those applicants who have GRE's greater than 1050, advanced tests scores above the 50th percentile, and undergraduate averages above 2.50. Special exceptions (perhaps one case in 30) require strong justification to the Admissions Committee by individual faculty and their academic program directors proposing to accept applicants whose scores fall below the minimum. Before qualified students are admitted to the College, a specific faculty member must agree to advise the student and supervise the student's program. The faculty adviser is appointed pro tem, and at the faculty or student initiative, the adviser may be changed. Historically the College has admitted applicants who had combined verbal and quantitative GRE scores from 1200 to 1500, with at least one test score above the 90th percentile. The advanced test score usually exceeds the 75th percentile. The overall and major grade point average usually exceeded 3.0. Three letters of recommendation are required and applicants under serious consideration are usually asked to visit the campus for an interview before a final decision on admission is made.

ACADEMIC REQUIREMENTS

All students will be required to complete the three (3) credit core course in each of the four basic subfields of oceanography: biological, chemical, physical, and geological oceanography. In addition, students will be required to complete Introduction to Applied Ocean Science (3 credits) and Introduction to Marine Policy (3 credits).

Beyond these required basic courses (18 credits), at least 15 credits beyond the masters program at the 800 level are required, of which six (6) must be in oceanography. The Oceanography Seminar must be taken at least once per year of residence. Students must also register for a minimum of nine (9) credits in research or dissertation during residence.

Course outlines for the four core oceanography courses are given in Appendix I.

EXAMINATIONS AND PROFICIENCY CRITERIA

Ph.D. students will be required to pass a screening examination in oceanography, either at the beginning of their residence, if they have a masters in oceanography, or at the end of their first year of residence. This examination will be administered by the academic committee of the Oceanography Program consisting of one member from each of the four subfields. They will then normally take the Ph.D. qualifying examination in their second year of residence. This examination and other criteria for admission to candidacy are consistent with those presently in effect for the Ph.D. in Marine Studies.

A demonstration of proficiency or relevant experience is required to the following:

A. Research Cruise. All students will be required to participate in at least one oceanography research cruise.

B. Statistics. All students will be required to have had at least one statistics course. The academic committee will evaluate any previous statistics course that a student wishes to claim for the requirement. Otherwise, a statistics course must be taken.

C. Computer Data Processing. Data processing and computer use are essential skills for research oceanographers. A several-day intensive training session will be offered by the CMS in the computer room in Lewes. All students must partake of this, unless they can bypass this requirement through petition of the academic committee. Mastery of a computer language is strongly urged, but not required.

D. Skills in communication and presentation. Formal requirements for both written and oral skills will be evaluated on an individual basis by the academic committee.

For the written requirement, a student's dissertation proposal will be evaluated by the committee for such aspects as organization, grammar, spelling, and logic, not on scientific content. If the proposal does not demonstrate good written skills, remedial action will be required. Remedial action can be through formal course work or through later submission of other writing, such as a course paper or a manuscript for publication.

For oral requirement, the academic committee members will evaluate a seminar presentation by the student in the Oceanography Seminar. The student would invite the committee for that presentation he wished to have considered.

E. Appreciation for foreign language or culture. Formal requirements will be established on an individual basis by the academic committee.

DISSERTATION REQUIREMENTS

Procedures and requirements for the dissertation will be the same as the present ones for the Ph.D. in Marine Studies.

Ph.D. Program in Oceanography

Report of the External Review Committee

Executive Summary

We were charged with reviewing and evaluating the Ph.D. Program in Oceanography within the College of Marine Studies. The primary purpose of the review was to determine whether this program warrants permanent status within the University of Delaware. We found the program to be well-conceived and of high academic standards. Although small in size, the focused emphasis on interdisciplinary strengths, the very active, enthusiastic faculty, and supportive administration have resulted in a high quality program which is very competitive at the national level. The program has been conservatively planned with respect to faculty additions and overall structure while still attaining real growth. The success of the program to date is both reflected in, and a result of, the enthusiasm and high morale of the faculty, students, and administration. The program is in a healthy stage of development and deserves continued support and nurture by the College and University. Our recommendation, without reservation, is that the program be given permanent status. We outline below more specific observations, comments, and recommendations on the program.

Curriculum:

The curriculum of the Oceanography program rightfully stresses interdisciplinary aspects, while still aiming to provide a firm basis within the subdisciplines. We were generally impressed with the existing program, but there were a few places where we felt that improvement was possible. First, we recommend that a more creative alliance with the Newark geology department be sought in order to

strengthen the marine geology and geophysics curriculum and graduate program. Although it may prove additionally necessary to make a new hire in marine geology, exploitation of existing personnel will likely prove more cost-effective. This encouragement, might for example, take the form of financial support for students in geological oceanography. Second, we suggest that a master of science in the oceanography program be established in order to recognize the existing distinction at the master's level and promote movement by students into the Ph.D. program. Third, we feel that more flexible approaches to the interdisciplinary course work should be strongly considered and discussed by the faculty. The requirement for taking all of the survey courses in both the same and other programs of the college could be replaced by allowing specific topical courses within those programs to be taken. For example, the distribution requirement within oceanography (3 survey courses in other subdisciplines) could be replaced by three courses within one outside subdiscipline, thus allowing an in-depth knowledge of a single topic. Once again, however, we would like to stress that our overall reaction to the curriculum was positive.

Faculty:

The faculty of the Ph.D. program in oceanography is uniformly enthusiastic and supportive of the program. We were impressed with the high morale of the faculty and we felt this is in part a consequence of the financial support that the college provides each faculty member. The faculty, while small, is clearly a high-quality and nationally recognized group. Evidence of their national stature is the exceptional success of the faculty in the competitive grant process. As a general rule, the size of grants in estuarine and coastal oceanography are

somewhat less than those in open-ocean oceanography, but the Delaware faculty have support levels that equal or exceed those at larger institutions.

The highly interactive and interdisciplinary character of the program faculty is a strong positive aspect and one that gives the program a distinctive character. Past recruitment has clearly been successful in selecting individuals who work well in the program's interdisciplinary climate, and attention should be paid to continuing this excellent tradition.

One aspect of the interactive faculty is that the Program in Oceanography draws great strength from the Marine Biology and Biochemistry Program. The Program in Oceanography needs to reflect clearly this strength when it advertises or describes itself.

The Program in Oceanography is relatively weak in the subdiscipline of Geological Oceanography yet the University of Delaware is strong in Marine Geology. Our discussions indicated that there is in both the Department of Geology and Program in Oceanography an interest in a stronger alliance. The faculty strength of the Department and the graduate student strength of the Program might be better combined. The Program in Oceanography could be strengthened considerably and the resources of the University more effectively used.

The growth projections of the Program in Oceanography appear to be conservative and realistic. It is clear that faculty recruitment is carefully thought out. This has produced a well-balanced, high quality, and very dedicated faculty that gives the Program a distinctive character.

Additional aspects:

The relatively modest size and geographical splitting of the program gave rise to initial concerns on our part. These concerns were generally unfounded, because the program uses size to its advantage (rather than disadvantage), and the split campus appears to be causing no serious problems. We felt, however, that awareness of research outside of the university could be improved by upgrading the seminar series to allow more frequent talks to be given by outside researchers. The main problem related to the Lewes-Newark separation is the transportation itself. Upgrading the transport service to provide faster, more comfortable vans would prove useful in maintaining high morale and promoting strong interactions. At present, the Lewes-Newark split seems to be causing no major problems, but we urge a continual vigilance to ensure that none develop in the future.

We find the university's financial commitment to the college to be most commendable. Further, the existence of an independent Marine Studies endowment is very useful. One important application of this endowment is to ensure continuity and long-term stability of graduate student support. For example, institutional support is crucial if research funds fall short, or in some cases, if a student wishes to change advisors.

Dr. Robert Aller
SUNY Stony Brook

Dr. Richard Barber
Duke University

Dr. Kenneth Brink
Woods Hole Oceanographic Institution



University of Delaware

RECEIVED

FEB 17 1988

COLLEGE OF MARINE STUDIES
OFFICE OF THE DEAN

COLLEGE OF MARINE STUDIES
LEWES COMPLEX
LEWES, DELAWARE 19958-1298

(302) 645-4266

MEMORANDUM

February 16, 1987

TO: Carolyn A. Thoroughgood, Dean
FROM: Ferris Webster *Ferris*
SUBJECT: Follow-up to the Oceanography Ph.D. Review

The Oceanography Program faculty has met and discussed the recommendations of the group that reviewed the Oceanography Ph.D. Program. I am writing to summarize our reactions. The faculty is in general agreement with the recommendations.

Regarding the recommendations to strengthen geological oceanography program: Drs. Webster and Glass agreed to discuss ways in which the program in geological oceanography could be strengthened. Drs. Ullman and Biggs will lead a review of the geological oceanography curriculum.

Regarding the possibility of a M.S. degree in oceanography: the faculty feels that there would not be enough oceanographic requirements to distinguish such a degree from a M.S. degree in Marine Studies. The current M.S. degree in Marine Studies seems to be working well for students in the Oceanography Program.

Regarding the recommendation that students be allowed to take higher-level courses in lieu of the obligatory core courses: a) with respect to the CMS core course requirements, the Oceanography faculty believes that students should be permitted to take a higher level course in the same program in lieu of the core course with the approval of the student's adviser and the Program Director of the other program; b) with respect to the Oceanography core courses, the faculty believes the flexibility already exists, through course waivers, to restructure the program for a given student. In the latter case, the faculty consensus is that there is no current need to change the requirements within the Program.

Regarding the need to improve Lewes/Newark transport: it is our understanding that steps are being taken at the College/University level to seek an alternative to the present Unistate bus.

Regarding the necessity to improve outside contacts: the Lewes faculty was in agreement that Oceanography Program members should not be complacent. Additional efforts will be made to increase contacts with outside colleagues.

FW:skl

cc: Oceanography Faculty
Dr. Charles Epifanio

9/3/87

DEPARTMENT OF ECONOMICS
UNIVERSITY OF DELAWARE
NEWARK, DE 19716

GRADUATE PROGRAM POLICY STATEMENT FOR PROPOSED NEW GRADUATE DEGREE

Section 1

Graduate Degree: Masters of Science in Economics
Date Authorized:
Degree Status: Proposed New Graduate Degree
Administration Officer: Associate Chair - Department of Economics

Section 2

Total Credits Required:

33 credits, of which at least 21 must be economics courses at the 500 level or above. (As a matter of advisement, students are strongly encouraged to take at least 27 credits in economics. More than six credits outside of economics or any credits of special problem must be approved by the Masters Committee and will be allowed only under special circumstances.)

Required Courses:

03-60-801	Microeconomic Theory	3 credits
03-60-802	Macroeconomic Theory	3 credits
03-60-822	Econometric Theory	3 credits
03-60-823	Econometric Applications	3 credits
03-60-8XX	Quantitative Course	3 credits
03-60-868/869	Master's Thesis	<u>6 credits</u>

TOTAL 21 credits

Other Requirements:

A written comprehensive examination

Participation in faculty-student research project or other relevant research experience

Regular attendance at departmental seminars and colloquia

Section 3 - Graduate Faculty

All full-time faculty at the rank of Assistant Professor or above. Part-time faculty at the discretion of the Chair.

Section 4 - Admission Policies

a) Test Scores on Standardized Exams:

Graduate Record Examination Aptitude Test:

Combined verbal and quantitative scores should exceed 1050 (with a comparable percentile on the new analytical section when percentile is available).¹

or

Graduate Management Admissions Test:

Score at or above the 55th percentile (a combined GRE of 1050 is approximately the 55th percentile).

b) Cumulative Grade Point Average:

A general undergraduate academic index of at least 2.50 on a 4.0 system.

c) Other Measures of Performance:

The department encourages three letters of recommendation. (These letters are required for the student applying for financial aid.)

d) Admissions Committee:

Masters Committee, composed of the Associate Chair and at least four additional faculty members.

e) Enrollment Projections:

Over the past six years the department has enrolled 13 to 20 students a year in the MA program. The proposed MS program will draw in part from this group and also generate new students. Conditional upon student demand and financial aid sources, we expect to admit 10 students a year.

f) Provision for Exceptions - Conditional Acceptance:

A student not meeting the criteria above may be accepted on a conditional basis. A student who has been accepted conditionally will be admitted regularly only after having established at least a 3.0 grade point average over the first four graduate courses. Students with a conditional acceptance are not considered for financial aid until they have established a good academic record in our program.

¹ For foreign students, the combined quantitative GRE score and the TOEFL score should exceed 1100, but conditional upon a strong showing on the quantitative part of the GRE exam. The TOEFL score must exceed 500. For the last seven graduating MA classes and for this year's entering class, the average combined GRE score has been 1152 and the average entering GPA has been 3.06.

Section 5 - Requirements for Graduation

Based on a 4.0 system, the student must achieve a grade point average of 3.0 averaged over 33 credits of graduate courses (see course requirements above). The time limit is 10 consecutive semesters. The written comprehensive exam is usually given in January and June of each year. Approximately 75 percent of the MA students pass this exam on the first attempt; the others are asked to retake the exam until they pass.

Section 6 - Degree Completion

Thesis or Research Paper:

Students are required to write a six-credit thesis which reflects originality and extends knowledge in the field. The student selects an advisor and two additional readers from the full-time faculty. There is a formal defense of the thesis.

Estimate of Number of Degree Candidates:

Over the past six years the Economics Department has awarded approximately 12 MA degrees a year. 10 are projected for June 1987. For the MS degree, candidates will be drawn from the MA group as well as new enrollment. It is expected that 5 to 10 MS degrees will be awarded per year once a steady state is reached.

Section 7 - Financial Aid

General Guidelines:

The department reserves financial aid for full-time students to be awarded on a competitive basis and generally not to extend more than one calendar year for any one student. Students receiving a bloc University Fellowship or Scholarship are recommended to take 12 credits a semester. Financial aid is not available to students who have been admitted to the program on a conditional basis. The department has no teaching assistantships. It is the department's policy not to award a full Bloc University Fellowship to any individual student. The normal aid pattern involving University Fellowships is to combine a one-half fellowship with a one-half tuition scholarship, or to subdivide a Fellowship into three tuition Scholarships. Financial aid decisions are to be made by the Masters Committee.

Projected Aid Levels:

For the last two entering MA classes (85-86 and 86-87), the aid distribution has been as follows:

Type of Student and Type of Aid	Year	
	1985-86	1986-87
Number of full-time equivalent students on University Fellowships	1	--
Number of full-time equivalent students on University Scholarships	5	7
Number of full-time equivalent students on University Minority Fellowships	1.5	2
Number of full-time equivalent students on University Minority Scholarships	.5	.5
Number of full-time equivalent students on department contract research funds	1.5	2
Number of full-time equivalent students - no aid	10	8
Number of full-time equivalent part-time students - no aid	7.5	7.5

These numbers are indicative of the approximate breakdown we expect over the next four years for the MA and MS (proposed) students combined. The department expects to be able to fund one full-time-equivalent research assistantship per year. The department has been receiving between two and three University Bloc Fellowships per year from the Graduate Office. The department has also received 10 University Minority Fellowships and Scholarships since 1980.

