

UNIVERSITY FACULTY SENATE

SUMMARY OF AGENDA

November 3, 1986

- I. ADOPTION OF THE AGENDA
- II. APPROVAL OF THE MINUTES: October 6, 1986
- III. REMARKS BY PRESIDENT TRABANT and/or PROVOST CAMPBELL
- IV. ANNOUNCEMENTS
 1. Senate President Callahan
- V. OLD BUSINESS
 - A. Resolution altering the membership of the Undergraduate Behavior Review Committee.
 - B. Resolution altering the membership of the Graduate Behavior Review Committee.
- VI. NEW BUSINESS
 - A. Request from the Committee on Committees (A. DeHaven, Chair) for approval of faculty appointment to the University Athletic Governing Board.
 - B. Request from the Committee on Committees (A. DeHaven, Chair) for confirmation of appointments to Senate committees.
 - C. Resolution to approve permanent status for the Ph.D. program in Climatology and change in name of the graduate major from "Applied Sciences - Climatology" to "Climatology."
 - D. Recommendation for provisional approval of the Master of Arts in Liberal Studies Program.
 - E. Report of existing University Policy on Conflict of Interest.
 - F. Introduction of new business.





University of Delaware

UNIVERSITY FACULTY SENATE
301 HULLIHEN HALL
NEWARK, DELAWARE 19716

(302) 451-2921

October 17, 1986

TO: All Faculty Members

FROM: Thomas F. Merrill, Vice President
University Faculty Senate

A handwritten signature in cursive script, reading "Thomas F. Merrill".

SUBJECT: Regular Faculty Senate Meeting, November 3, 1986

In accordance with Section IV, paragraph 6 of the Constitution, the regular meeting of the University Faculty Senate will be held on Monday, November 3, 1986 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 6, 1986.
- III. Remarks by President Trabant and/or Provost Campbell.
- IV. Announcements
 1. Senate President Callahan
- V. Old Business
 - A. Resolution from Senator Anne Marie Tierney altering the membership of the Graduate Behavior Review Committee.

WHEREAS: the present membership of the Graduate Behavior Review committee includes only one graduate student representative, and

WHEREAS: increased student input would be beneficial to the Committee; be it therefore

RESOLVED: that an additional graduate student representative, to be chosen by the Graduate Student Association, be appointed to the Graduate Behavior Review Committee.

- B. Resolution from Senator Anne Marie Tierney altering the membership of the Undergraduate Behavior Review Committee.

WHEREAS: the present membership of the Undergraduate Behavior Review Committee includes only one undergraduate student representative, and

WHEREAS: increased student input would be beneficial to the committee, be it therefore

RESOLVED: that an additional undergraduate student representative from the Committee on Student Life be appointed to the Undergraduate Behavior Review committee.

VI. New Business

- A. Request from the Committee on Committees (A. DeHaven, Chair) for approval of faculty appointment to the University Athletic Governing Board.

RESOLVED, that the following reappointment to the University Athletic Governing Board is hereby approved:

John Burmeister September 1986 - September 1989

- B. Request from the Committee on Committees (A. DeHaven, Chair) for approval of faculty appointments to two-year terms on Senate committees.

RESOLVED, that the following appointments to two-year terms, beginning September 1, 1986, are hereby approved:

Library Committee - Member: David Kirchman
Committee on Student and Faculty Honors - Member: Kent Price

- C. Recommendation from the Committee on Graduate Studies (L. Lemay, Chair) with the concurrence of the Coordinating Committee on Education (S. Crawford, Chair), for permanent status of the Ph.D. in Applied Sciences - Climatology and change in name of the graduate major from "Applied Sciences - Climatology" to "Climatology." (Attachment 1) [Provisional approval was given for four years in December 1979, extended for two years in March 1984.]

RESOLVED, that the Faculty Senate approves and recommends to the Board of Trustees that the Ph.D. Degree in Climatology be granted permanent status and recommends that the name of the graduate major be changed from "Applied Sciences - Climatology" to "Climatology."

- D. Recommendation from the Committee on Graduate Studies with the concurrence of the Coordinating Committee on Education, for provisional approval of the Master of Arts in the Liberal Studies Program. (Attachment 2)

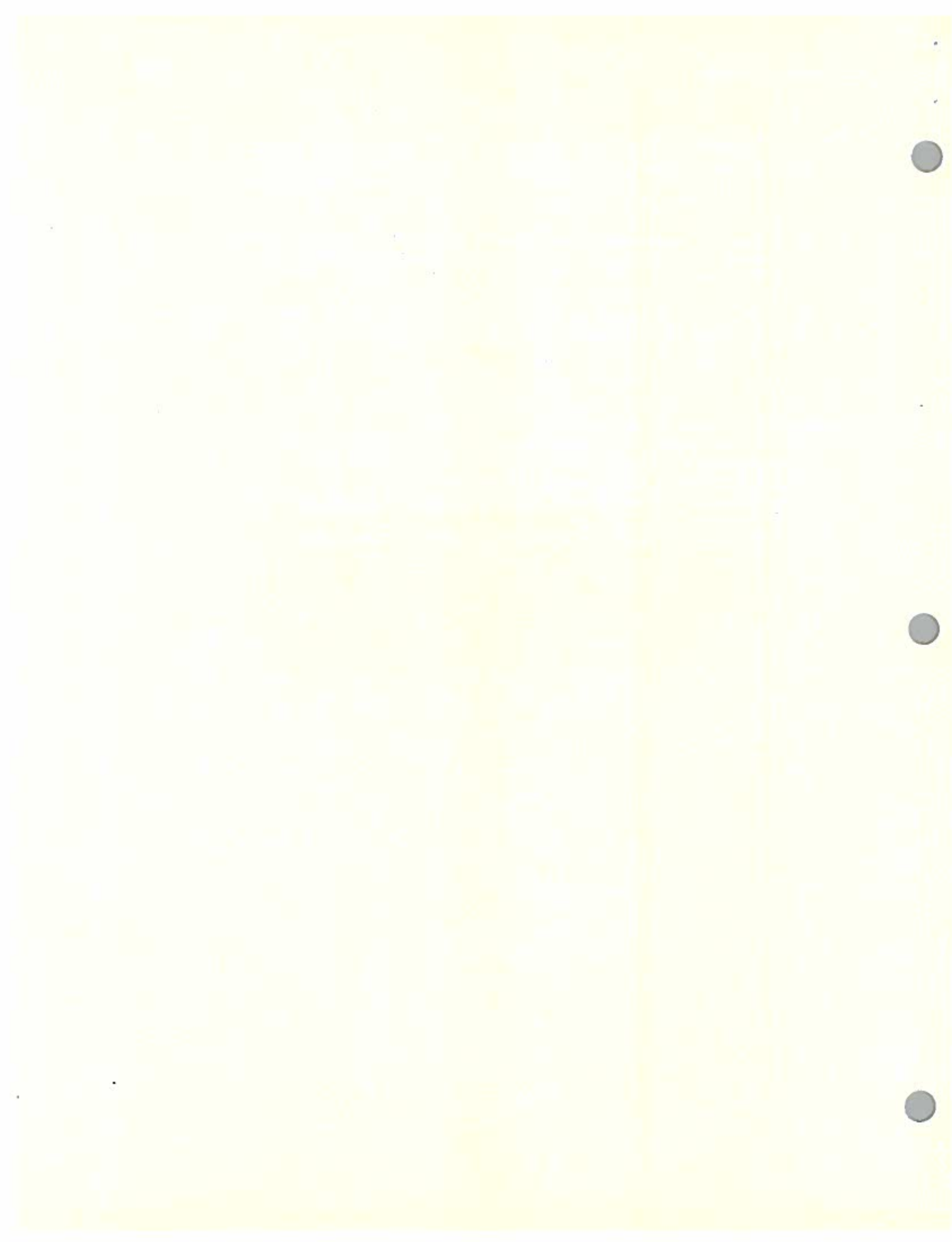
RESOLVED, that the Faculty Senate approves provisionally, for four years, commencing September 1987, the establishment of the Master of Arts in Liberal Studies Program with review for permanent status to occur in 1991-1992.

- E. Report of existing University Policy on Conflict of Interest, as a matter of information, by the Committee on Research (P. Weil, Chair). (Attachment 3)
- F. 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 Activity List

1. Resolution to approve permanent status for the Ph.D. program in Climatology and change in name of the graduate major from "Applied Sciences - Climatology" to "Climatology"
2. Recommendation for provisional approval of the M.A. in Liberal Studies Program
3. Report of existing University Policy on Conflict of Interest

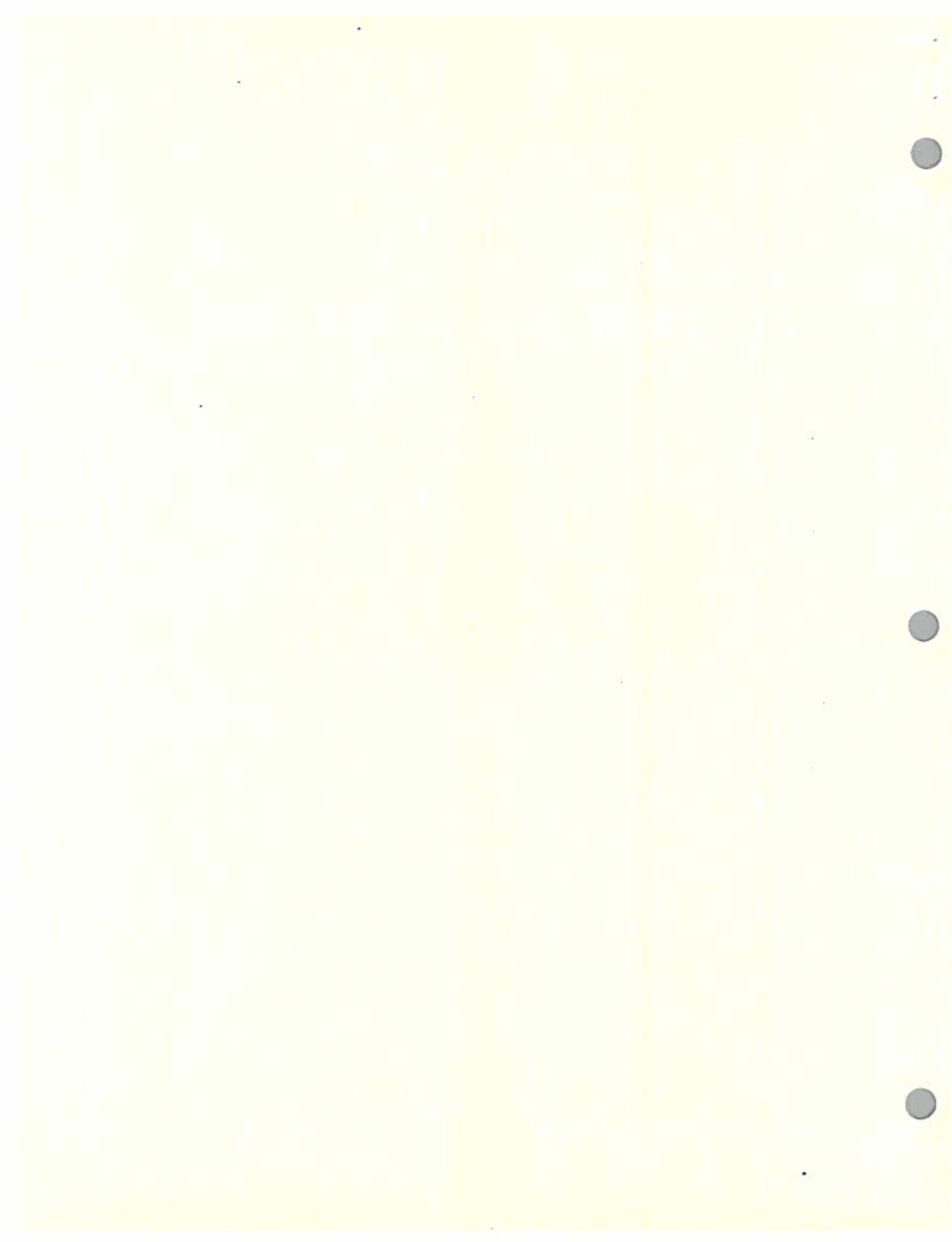


COMMITTEE ACTIVITIES REPORT

COMMITTEE ON COMMITTEES (A. DeHaven)

1. Staffing vacant positions on standing committees of the Senate.
2. Forming subcommittees to review charges of all Senate standing committees.
3. Discussing selection of alternates to Board of Trustees committees.

/wc



REPORT OF ASSOCIATE PROVOST FOR GRADUATE STUDIES

REVIEW OF GRADUATE PROGRAM FOR PERMANENT STATUS

PhD IN CLIMATOLOGY (APPLIED SCIENCES)

Introduction

The faculty of the Geography Department proposed a Ph.D. program in Climatology, under the Applied Sciences umbrella, in Fall, 1979. The program was approved by the Faculty Senate on December 3, 1979, on a provisional basis for a four-year period beginning September, 1980, with review for permanent status in Spring, 1984.

There were some delays in recruitment of the first students and getting the program started. In view of this fact the department proposed an extension of provisional status for two years and this extension was approved by the Senate on March 5, 1984.

This document is a report on the review that was carried out in Spring, 1986.

Review

The review is composed of two parts: (a) a comprehensive report prepared by the faculty on the operation of the program from inception through Fall, 1985; (b) the report from an external panel who visited the University March 24-25, 1986, to interview faculty, students, and administrators.

The report prepared by the faculty was mailed to the review team before their campus visit, and copies of that report have been supplied to all members of the Senate Committee on Graduate Studies. Since the report is detailed and lengthy it is not part of this document. An outline of the report is given in the table of contents, see next page. It is also of interest to reproduce part of the introductory section of that report:

Our Climatology Ph.D. program was designed to be of high quality but small; that is "no more than four or five students are (were) estimated to be in residence in any given year" because of the modest number of core faculty (Section 10) and our desire that "no immediate, direct cost to the University" would be incurred. As most Ph.D. students would be in residence for three years, this also meant that we planned to enroll no more than two students per year, on the average.

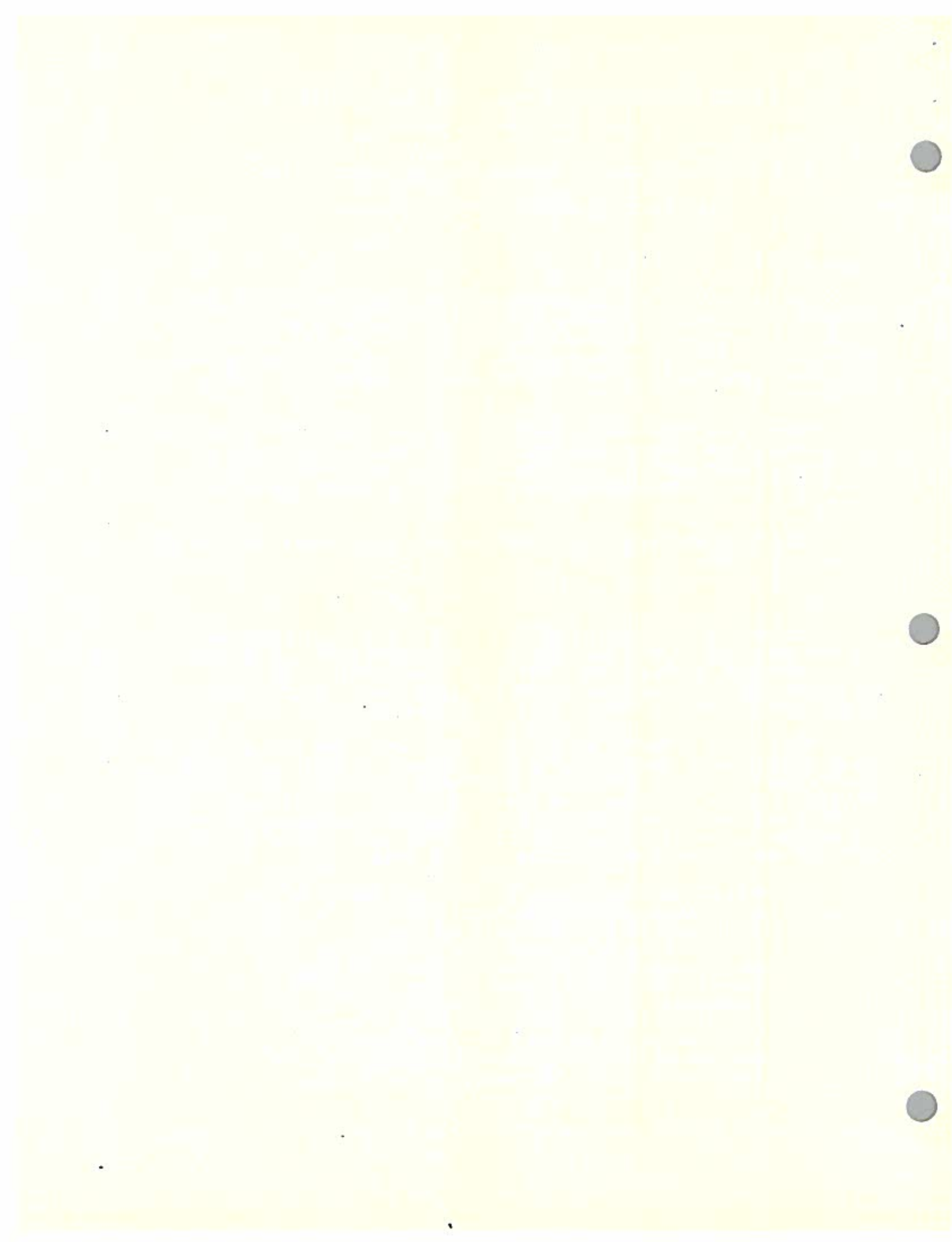


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At the present time, there are more Ph.D. students in Climatology (eight) than we projected and three more students have been accepted for Fall, 1986 (two have already indicated that they will matriculate). This coming Fall, (1986) then, there will be at least eight or nine (two should graduate by August--on schedule) Ph.D. students in residence, which is well-above our goal of five.

While eight or nine Ph.D. students in residence represents a somewhat higher than expected workload for the core faculty, we anticipate being able to fill a faculty line this coming year with a climatologist and this will agreeably reduce the student/faculty ratio. This new climatology faculty line will also assist us in advising our growing numbers of Master's-level climatology students, attracting additional extramural monies and broadening our climatological course offerings.

We believe that the Department's Ph.D. climatology program already ranks among the top geographical climatology programs in the nation. We are successfully competing for the best climatology graduate students. Moreover, at the last two annual meetings of the Association of American Geographers, three of our climatology presentations were chosen as "newsworthy" by the meeting organizers (more than any other geography department) and our research has been afforded national media attention. At least two of our climatology graduate students were attracted to the graduate program after reading about our research in the national media.

Review Panel

Two persons were appointed to serve as an external review panel by the Associate Provost for Graduate Studies, chosen from a list of senior academic climatologists in the U.S. provided by Professor Mather and his colleagues. There are relatively few doctoral level programs in Climatology in the U.S.; essentially there are five programs other than Delaware. The two panel members chosen are from two strong Climatology graduate programs:

Dr. Anthony J. Brazel
Professor, Department of Geography, and Director,
The Laboratory of Climatology
Arizona State University, Tempe

Dr. Merlin P. Lawson, Chair
Department of Geography, and
Acting Assistant Dean of Graduate Studies
University of Nebraska, Lincoln

Panel members were provided before their arrival with copies of the comprehensive report on operation of the Climatology program in its first years, as well as copies of University catalogs, brochures, etc. The agenda for the panel visit is given on the next page.

Panel Report

The report of the external panel recommends unambiguously that the Ph.D. in Climatology be given permanent status. The report is reproduced at the end of this document.

The report notes that our program in Climatology is primarily distinguished as a center of applied climatology; none of the other doctoral programs in the U. S. duplicates the depth of research and consulting activities in applied climatology at Delaware.

Our program has an edge when competing for students wishing to remain on the eastern seaboard or those with interests similar to the applied research interests of the faculty at Delaware. The report notes a definite locational advantage of our program in its proximity to various federal agencies such as NOAA and NASA Goddard Space Laboratory.

The report gives a number of recommendations for the future development of the program. In summary form they are:

- . Continue to foster close relationships with federal agencies such as the Department of Agriculture, NOAA, and the Goddard Space Laboratory.
- . Continue to maintain a programmatic identity in terms of expertise (in applied climatology).
- . Continue to provide a leadership role in the Climatology Specialty Group of the Association of American Geographers.

CLIMATOLOGY

Review for Permanent Status, March 24, 25, 1986

Sunday, March 23

Panel members arrive, hotel reservations at Newark Travelodge, 268 E. Main Street, for March 23 and 24.

Monday, March 24

- 7:50AM *Pick up panel members at Travelodge registration desk (R. B. Murray)
- 8:00 *Breakfast at Read Room, Student Center, for panel, J. R. Mather, R. B. Murray, for discussion of purpose of review, report, agenda, and overview of program.
- 9:15-11:50 +Panel in department, appointments to be arranged.
- 12:00 Noon *Lunch meeting Blue & Gold, Newark Room, for panel and 4 or 5 graduate students,+.
- 1:45-4:30 +Panel in department, appointments to be arranged.
- 4:45 +Return panel to Travelodge.
- 6:15 +Pick up panel at Travelodge registration desk (J.R. Mather).
- 6:30 *Open bar, Clayton Hall, Room 110, followed by dinner at 7:00 for panel, Mrs. Brazel, J. R. Mather, Climatology faculty, other guests to be arranged+. Total about 10.

Tuesday, March 25

- 7:50AM *Pick up panel members at Travelodge registration desk (R. B. Murray).
- 8:00AM *Breakfast and exit interview, Read Room Student Center, for panel, R. B. Murray, Jeffrey Raffel, Robert Nicholls, Dean Gouldner.
- 9:30-10:00 *Adjourn, arrange transportation to airport or train.

- * Arranged by Graduate Office
+ Arranged by J. R. Mather

- . The faculty core should be expanded by one position.
- . Cultivate closer ties with faculty teaching methodological courses in the Geography Department.
- . Develop more released time for core faculty and a strong visitor program.
- . Increase the number of TA lines.
- . Obtain a weather facsimile recorder and satellite dish.
- . Get all faculty, staff and students located in one place.
- . An equipment technician and cartographic technician are needed.
- . Seek additional funds to assure continuity of research assistantships.
- . Additional travel funds for faculty are needed.
- . Faculty salaries should be compared to those reported in the Bulletin of the American Meteorological Society to insure that serious disparities do not exist.

Applied Sciences

The Climatology Ph.D. was initially proposed and approved under the aegis of the University's Applied Sciences Program. The role of Applied Sciences is undergoing a review at this time as the need for such an umbrella program has changed qualitatively since its inception in the 1950's. The idea of phasing out the current Applied Sciences Program is being considered.

Requirements for the Climatology Ph.D. can be met by courses offered by Geography and other departments, without need for involvement of the Applied Sciences structure.

Summary

It is recommended that permanent status be awarded to the Ph.D. in Climatology, a program under the supervision of the faculty in the Geography Department. Inclusion of Climatology in Applied Sciences should be dropped simultaneous with the award of permanent status.

April 24, 1986

Dr. Richard B. Murray
University Coordinator for Graduate Studies
234 Hullihen Hall
Newark, Delaware 19716

Dear Dr. Murray:

I am pleased to enclose the report of our evaluation and recommendations pertaining to the Ph.D. Program in Applied Sciences/Climatology at the University of Delaware. We believe it is representative of our oral ~~existing~~ report presented Tuesday morning, March 25, 1986.

The Department of Geography at Delaware has a proud tradition in climatology, with excellent leadership. We are extremely optimistic about the future growth of its doctoral program.

If we have failed to address any particular concerns of yours, please do not hesitate to contact us. We appreciate having the opportunity to assist you with your review.

Sincerely,



Merlin P. Lawson
Acting Assistant Dean of Graduate Studies
Chair, Department of Geography

Anthony J. Brazel
Arizona State University

Enclosure

xc: Dr. John R. Mather, Chair
Department of Geography
University of Delaware

RECEIVED

APR 28 1986

GRADUATE OFFICE

Report of the External Academic Review Team
Doctoral Program in Applied Sciences/Climatology
University of Delaware

Anthony Brazel
Office of the State Climatologist
Arizona State University

Merlin Lawson
Department of Geography
University of Nebraska-Lincoln

I. Role and Mission of Program

As we approach the twenty-first century, it is becoming increasingly apparent that climatic variability will exert considerable influence on the quality of human life, regional economic stability, and global food production. Thus, the assessment of climatic resources and their sensitivity to change becomes critical to the planning and decision-making processes involved in establishing a rational policy for dealing with problems related to energy consumption, food production, or environmental issues. The origin of a geography program (BA degree, 1966) at the University of Delaware strongly reflects a commitment to promote an educational and research environment capable of analyzing the impact of climate-related decisions on the milieu of us all.

Growing out of this vigorous departmental tradition were graduate programs which permitted the student to increasingly specialize in climatology (MA and MS degrees, 1971), culminating with the establishment of an interdisciplinary Ph.D. program in Applied Sciences-Climatology in 1979, to be administered by the Department of Geography. The purpose of the doctoral program in climatology (as related in Self-Study Report) is to "provide sound academic training in the field of climatology for students seeking to become either (1) applied climatologists working in business, industry or government; or (2) university or college teachers and/or researchers." The accomplishment of these goals has been enhanced by a profound commitment to attract external

grants, place graduate students in laboratory and experiential learning environments and teach with distinction in the classroom.

Graduate studies at the University of Delaware seek to attain three objectives: to create, synthesize, and disseminate knowledge. The doctoral program in Applied Sciences-Climatology appears to fulfill its role in the pursuit of these goals. The diversity of courses, seminars, and research opportunities provide climatology graduate students with the requisite pedagogical fundamentals for independent thinking and analysis.

The size of the graduate programs within the Department of Geography reflects a conscious determination to restrict the number of students to a manageable number, given the limited faculty resources. With the shortage of climatologists nationally, the doctoral program is constrained primarily by the number of faculty participating in the degree process. As a result, the faculty have had the luxury of admitting only the most highly qualified applicants to the program. These students enjoy an enviable tutorial relationship with the faculty. Because of their research experience, they have achieved national visibility in terms of presentations at professional meetings and publications in refereed journals. Thus, as they complete their doctoral degrees, they will qualify for excellent placement opportunities.

In assessing the success of the doctoral degree in Applied Sciences-Climatology, we intend to evaluate the viability of the role and mission of the program in terms of the following criteria:

National Perspective of the Delaware Climatology Program

Quality and Quantity of Faculty

Quality of Students and Admission Standards

Facilities and Equipment

Supplemental Support

Budgetary Considerations

Our recommendations are incorporated at the end of each of these sections.

II. National Perspective of the Delaware Climatology Program

In attempting to define the field of climatology, the British climatologist, E. T. Stringer (1975) wrote:

The variations in the Earth's surface have profound effects on the interchange of heat, moisture, and momentum between land, water, and atmosphere, and are vital in determining specific climatic conditions; here local empirical observation as well as meteorological theory is absolutely necessary. Climatology thus does not belong wholly within the fields of meteorology or geography. It is a science--really an applied science--whose methods are strictly meteorological but whose aims and results are geographical.

Thus, in the United States as in most nations, climatology has been more closely associated with departments of geography than those of meteorology. It is assumed that students acquire the fundamentals of meteorology prior to diversifying their interests into the various approaches available in climatic studies. These major subgroups of climatology include: climatography, dynamic climatology, physical climatology, synoptic climatology, applied climatology, and micro-climatology.

When one thinks of universities with nationally recognized climatology programs, it is common to associate the school with a particular strength in one of the above sub-fields. The climatology program at the University of Delaware is primarily distinguished as a center of applied climatology especially in water budget modeling, evaluation of cloud seeding, climatic stress, agricultural yield modeling, and the socioeconomic cost of anomalous weather conditions. Other nationally prestigious programs in climatology are located within Departments of Geography at Arizona State University, the University of Colorado, the University of Nebraska, the University of Wisconsin-Madison, and Louisiana State University. Each of these programs is

unique in terms of special emphasis. None duplicates the depth of research and consulting activities in applied climatology at the University of Delaware. Thus, this program has an edge when competing for students wishing to remain on the eastern seaboard of the United States or those with interests similar to the applied research interests of the climatology faculty at the University of Delaware.

A definite locational advantage of this climatology program is its proximity to various federal agencies such as the National Oceanic and Atmospheric Administration and the NASA Goddard Space Laboratory. This fosters closer working relationships with agency scientists and even enhances opportunities for students to serve in internship programs.

A fourth unique aspect of the program is the fact that students obtain a doctorate in Applied Sciences-Climatology, not Geography per se. The universities listed above offer the Ph.D. in Geography with specialization in climatology. The opportunity to earn a doctorate in climatology appeals to many students with prior degrees outside of geography such as meteorology or physics. This sentiment was expressed by almost all the students we interviewed during our visit. Concerns were expressed about the necessity of taking "geography courses" if the degree program was in climatology-geography. The external review team appreciates these notions but considers them to be parochial and potentially limiting to the curriculum development of the student. It should be recognized that the core faculty all have their doctorates in geography. Yet the students seem anxious to deny a close association with the geographic discipline. We are not prepared to recommend a change in the current designation of the degree title. However, if the status of the program changes with respect to applied sciences, the faculty should consider a more formal association with geography even to the extent of initiating common core courses.

Recommendations:

1. Continue to foster close relationships with federal agencies such as the Department of Agriculture, NOAA, and the Goddard Space Laboratory. Proximity to these scientists could be exploited in terms of visiting scholars, courtesy appointments, or adjunct professorships.
2. Continue to maintain a departmental or programmatic identity in terms of expertise. For the student with specific interests in applied climatology, this program is difficult to surpass.
3. Continue to provide a leadership role in the Climatology Specialty Group of the Association of American Geographers. Both faculty and students have earned a reputation for research excellence. Special sessions are commonly arranged at national meetings by the "Delaware School." This activity reflects well on the vitality of the program.

III. Faculty

The Department of Geography's report of February 1986, identifies three sets of faculty involved in one way or the other with the Ph.D. Climatology Program: 1) core faculty, 2) contributing faculty, and 3) support faculty. Core faculty are identified as Professors Kalkstein, Mather, and Willmott; contributing faculty as Professors Field, Klemas, and Schuenemeyer; and support faculty as Professors Meierding, Webster, and Garvine. In our review we met with members of all three groups, with the exception of Webster and Garvine from the support faculty group.

A. Core Faculty Expertise

The quality of the core faculty is considered excellent in the climatology areas of physical climatology, synoptic climatology, applied and water budget climatology. Productivity measures of the faculty such as publications and research would rank among the top departments in the country

offering a curriculum in climatology. On average, the core faculty are producing seven major publications in climatology and related disciplines each year and acquiring over \$140,000 in research grant money each fiscal year. This is a truly outstanding record. Of major note is the outstanding international record of Dr. J. Mather of the Geography Department. Drs. Kalkstein and Willmott are contributing to the discipline in major ways and have already in their short careers gained a considerable reputation in the field of Climatology.

B. Support and Contributing Faculty

The support and contributing faculty are equally active in both research and publications. Their expertise in the areas of remote sensing, microclimatology, earth science statistical methodologies, cartography, and geomorphology are excellent adjuncts to the areas of climatology taught by the core faculty.

C. Evaluation of Faculty Quantitative Viability

Program needs, in terms of teaching the large numbers of courses required of the program and maintaining appropriate recruitment through the provision of Research Assistantships, appear quite high. At present, student numbers are maintained at a level sufficient to provide a critical mass in an excellent learning environment, and at the same time with the realization that there are practical limitations on student numbers (ca. 10 or so). The faculty realize that with only three core faculty, it is impossible at present to accommodate large numbers in the program. At present, there is a relatively good match between student numbers and core faculty resources. However, there are definite needs, especially with the anticipated loss of Dr. Field and the major involvement of Dr. Mather as the Chair of the Geography Department.

Recommendations:

Several points to consider in terms of faculty resources are as follows:

1. The faculty core should expand by one position to alleviate loss of Dr. Field and heavy administrative duties of Dr. Mather. This position probably should relate to program emphasis areas of physical climatology or microclimatology, but there is also a need in the program for a dynamic climatologist.
2. The program could possibly benefit from cultivating closer ties with faculty teaching methodological courses in the Geography Department, perhaps in a seminar framework.
3. The core faculty could benefit from more release time and a strong visitor program in order to further develop student exposure to many areas of Climatology and Geography.

IV. Students

A. Admission Criteria

The admission criteria are stringent for this program as they well should be. The program has already made allowances for the potentially excellent student who may not have had all the mathematical background required. These students should be given the opportunity to study in the field of Climatology, but also should complete the specified requirements in the time they are in the program.

B. Program Requirements

Program requirements appear to be well designed, especially the concept of tool courses taught by outside faculty. These courses as part of the main requirements provide an excellent concept. The key is to maintain strong interest in the program by the support faculty.

C. Student Quality

Based on the factual information provided about the students and based on

interviews with the students, student quality is considered superb. The students now in the program are among the top students presently studying in the field of Climatology. Morale among the students and general interest in the program appear excellent. Core faculty and support faculty are much respected by the students. Faculty perceive the great potential of these students for making major contributions in the field of Climatology.

D. Student Numbers

The critical mass factor in order to provide an adequate learning environment must be maintained. However, numbers must be limited due to the small number of core faculty. There is clearly a lack of permanent Teaching Assistantships provided for the program, although provision of Research Assistantships is excellent. However, the RA's are tied to a grant program which ebbs and flows over time. A more permanent provision of assistantships would be accommodated with the creation of increased TA lines.

Recommendation:

One specific recommendation ought to be considered: Increase the number of TA lines. This would assure student support, contribute to an internship concept of the student who is likely to choose an academic career, and free up core faculty so that they can contribute more to research and student advisement.

V. Facilities and Equipment

The department is well-equipped to fulfill its teaching and research goals, particularly in terms of computer facilities, cartographic equipment and apparatus associated with a microclimatology laboratory. These facilities are comparable to those at most doctoral programs in geography. Students have every opportunity for hands-on experience, given this array of instrumentation. One serious limitation, however, is the lack of facsimile weather charts to enhance coursework in synoptic meteorology. The National

Weather Service provides over 130 types of weather charts (surface conditions, upper air flow, satellite images, soil moisture, snow cover, etc.) which are fundamental to teaching synoptic meteorology. These recorders with a satellite dish receiver can be purchased for less than \$12,000. The charts would add a significant dimension to the program.

The University Library has holdings in all the major climatological and related periodicals. The department also has an extensive reprint collection of the Laboratory of Climatology. Students enjoy a close proximity to the library.

One problem with the facilities, however, is the division of staff and students into two separate buildings. The geographic distance between the buildings tends to isolate the faculty and students. Sharing facilities with the theater arts apparently also has its limitations.

Contributing toward the success of the role and mission of the doctoral program are ancillary units which provide students with a broadened academic and professional perspective of the discipline. The Office of the State Climatologist, Dr. John R. Mather, is located in the Department of Geography. The activities of the State Climatologist's Office provide useful experience for students as they become aware of the concerns of the public for climatic information, techniques for relating that data, and the methods of interpretation of climatological applications.

The Center for Climatic Research was organized in 1978 just prior to the establishment of the doctoral program. The Center primarily studies the effects of climate on human activities. Grants and contracts with the National Science Foundation and National Weather Service have contributed to the instrumentation and equipment available for the instructional goals of the department. Climate-related research of the Center is normally disseminated in the series Publications in Climatology, a respected monograph series

originally issued by C. W. Thornthwaite Associates Laboratory of Climatology. Recent publications document distinguished climatological investigations from the various nationally recognized centers of climatic research.

Recommendations:

1. The acquisition of a weather facsimile recorder and satellite dish is highly recommended. Perhaps the most significant immediate impact of the system would be to enhance the teaching of synoptic meteorology and synoptic climatology. However, the timely access to a multitude of data is advantageous for many research projects.
2. We recognize the difficulties of providing a unified space for the entire department; faculty, staff and students. Until this is achieved, the learning and research environment will be less than optimal.
3. There is a glaring need in the Geography Department for an Equipment Technician and Cartographic Technician to handle the climatic equipment and to provide adequate services for support of research and publications. Such personnel would also serve the Center for Climatic Research and the State Climatologist's Office. These positions could be student employees, but preferably staff.

VI. Supplemental Support

A. External Grants-Research Initiatives

Faculty associated with the Ph.D. Climatology Program at Delaware have acquired a variety of research grants, both work on theoretical climatology and applied climatology. This research has supported many of the students in the program and has resulted in both faculty and student publications and presentations at professional meetings both within the field of Geography and Climatology and other disciplines. An average of \$140,000 per year is acquired in research grants by the Climate Program involving at least one

major grant per year since 1979. The research produced involved not just the core faculty, but also the contributing and support faculty. The record of the program is outstanding in the provision of student support and education in research areas of Climatology. Research Assistantships have been provided almost every student in the program.

B. Internal Supplemental Support

Faculty in the program have assisted the students in acquiring fellowships, stipends, and support from entities such as UNIDEL and UDRF. Through these mechanisms that have provided enrichment of the program several important components of the program have been maintained such as computers, supplies, equipment, visiting scholars, and publications. Some of the support has been seed money for the development of larger research grants from outside agencies. The seed money has been put to good use through acquisition of several major external grants over the last several years. The seed money was money well spent.

VII. Budgetary Considerations

The fiscal support provided for a department is generally indicative of the potential for sustained vitality and growth of a quality program. The summary report prepared for the permanent status review omitted any reference to budgetary considerations. Thus, the external review team was not able to make a systematic review of the adequacy of funding, salaries, or assistantship stipends. We are prepared only to share our impressions concerning these issues. It is suggested that an addendum be prepared which addresses the cost effectiveness of the program, comparative salary and stipend data, and supplemental funding from indirect or overhead costs.

A. Supplies and Operating Expenses

There appears to have been a 19% increase in the operating budget in the past five years. This increase is probably close to that of peer

institutions. The more volatile, less predictive aspect of the budget pertains to overhead recovery. Apparently this varies considerably annually, dropping from \$20,000 last year to \$10,000 this year. This fluctuation makes it difficult for long range planning, but the amounts significantly augment the operations of the department. If the faculty can not sustain its recent success in acquiring external grants and contracts, it would be very difficult to support the program at its present quality. Most vulnerable, of course, are the research assistantships. For this reason, it would be appropriate to seek funds for improving the balance between research assistantships and teaching assistantships.

B. Assistantship Stipends

It is our impression that stipends for graduate assistants are very competitive, nationally. We perceive no disadvantages in competing for the best students. Tables I and II were derived from the 1985-86 Graduate Assistantship Stipend Survey sponsored by the Council of Graduate Schools.

C. Travel

It is our understanding that the department is allocated \$800 annually for travel to professional meetings. This is augmented by income from external grants so that this year approximately \$250 per person is available for travel if a paper is being presented. This allowance is surprisingly low and needs to be increased. The most active researchers are being penalized by their own success in getting onto national programs. The fact that graduate students receive a small travel stipend is very commendable as many departments do not provide this support.

D. Faculty Salaries

Data on faculty salaries were not provided in the report. Every two years the American Meteorological Society publishes the results of an elaborate survey of academic salaries. We recommend comparisons be made with

DEPARTMENT / UNIVERSITY	SUMR	T.R.	GTA-MIN	GTA-MAX	GTA-AVG	STU-PD-TU/FEES	GTA-NET •	HRS-REQ	NET/HR
GEOGRAPHY									
ARIZONA STATE UNIVERSITY	N		4960	7850	6500	990	5510	20	8.60
INDIANA UNIVERSITY	Y		4385	4785	4530	248	4282	20	6.69
KANSAS STATE UNIVERSITY	N		6012	6012	6012	471	5541	18	9.61
OHIO STATE UNIVERSITY	Y		5400	7380	6219	0	6219	20	9.71
OKLAHOMA STATE UNIVERSITY	Y		6003	6003	6003	306	5697	20	8.90
OREGON STATE UNIVERSITY	N		2500	3200	2531	285	2246	12	5.84
PENNSYLVANIA STATE UNIV	Y		5560	5560	5560	0	5560	20	8.68
STATE UNIV OF NY AT BUFFALO	N		4800	8514	6310	171	6139	18	10.65
UNIV OF ALABAMA	Y		5500	NA	5800	0	5800	20	9.06
UNIV OF ARIZONA	N		2853	2853	2853	990	1863	10	5.82
UNIV OF ARKANSAS	Y		3434	3434	3434	0	3434	20	5.36
UNIV OF CALIFORNIA-BERKELEY	N		9585	11400	10100	1406	8694	20	13.58
UNIV OF CALIFORNIA-LA	N		9585	11241	10000	1347	8653	20	13.52
UNIV OF COLORADO-BOULDER	Y		6490	6490	6490	296	6194	20	9.67
UNIV OF DELAWARE	N		6625	7330	6970	94	6876	20	10.74
UNIV OF FLORIDA	N		5019	5019	5019	951	4068	13	9.77
UNIV OF GEORGIA	Y		5731	6113	5922	1362	4560	13	10.96
UNIV OF ILLINOIS-CHAMPAIGN	Y		5250	6000	5550	254	5296	20	8.27
UNIV OF KANSAS	Y		2810	10665	5995	315	5680	20	8.87
UNIV OF KENTUCKY	Y		4800	5200	5000	50	4950	20	7.73
UNIV OF MARYLAND-COLLEGE PARK	N		7000	8050	7080	145	6935	20	10.83
UNIV OF MICHIGAN	Y		5846	8294	5911	1695	4216	18	7.31
UNIV OF MISSOURI-COLUMBIA	N		5500	6800	5767	1195	4572	25	5.71
UNIV OF N. CAROLINA-CHAPEL HILL	N		5500	5500	5500	769	4731	10	14.78
UNIV OF NEBRASKA-LINCOLN	Y		5000	5450	5169	201	4968	15	10.35
UNIV OF NEW MEXICO	Y		4800	7000	5606	0	5606	20	8.75
UNIV OF NORTH DAKOTA	Y		5400	5400	5400	174	5226	15	10.88
UNIV OF OKLAHOMA	N		7100	7100	7100	497	6603	20	10.31
UNIV OF SOUTHERN CALIFORNIA	Y		7132	8230	7900	182	7718	20	12.05
UNIV OF WASHINGTON	N		6228	7182	6678	282	6396	20	9.99
UNIV OF WISCONSIN-MILWAUKEE	N		6066	6588	6327	2003	4324	14	9.65
GEOLOGY									
ARIZONA STATE UNIVERSITY	N		4960	7850	6500	990	5510	20	8.60

DEPARTMENT / UNIVERSITY

SUMR T.R.

GRA-MIN

GPA-MAX

GRA-AVG

STU-PD-TII/FEES

GRA-NET

HRS-REQ

NET/HR

GENETICS

PERNSYLVANIA STATE UNIV	N	5220	7940	7007	0	7007	20	10.94
STANFORD UNIVERSITY	Y	6480	9300	7000	0	7000	20	10.93
UNIV OF CALIFORNIA-BERKELEY	N	7434	9770	7434	1406	6028	20	9.41
UNIV OF GEORGIA	Y	6113	6113	6113	1362	4751	13	11.42
UNIV OF N.CAROLINA-CHAPEL HILL	N	5500	5500	5500	769	4731	10	14.78

UNIV OF UTAH	N	6000	8500	8500	0	8500	20	13.28
UNIV OF WASHINGTON	N	6228	7182	6678	282	6396	20	9.99
WASHINGTON STATE UNIV	N	6048	6462	6255	296	5959	20	9.31

GEO FLUID DYNAMICS	N	6200	6700	6436	0	6436	18	11.17
PRINCETON UNIVERSITY								

GEODETIC SCI & SURVEY	Y	5400	6750	5949	0	5949	20	9.29
OHIO STATE UNIVERSITY								

INDIANA UNIVERSITY	Y	4385	4785	4530	248	4282	20	6.69
KANSAS STATE UNIVERSITY	N	3006	3006	3006	666	2340	16	4.57
OHIO STATE UNIVERSITY	Y	5760	5760	5760	0	5760	20	9.00
OKLAHOMA STATE UNIVERSITY	Y	6003	6003	6003	306	5697	20	8.90
OREGON STATE UNIVERSITY	N	7000	9000	8359	285	8074	20	12.61

PERNSYLVANIA STATE UNIV	Y	5560	5560	5560	0	5560	20	8.68
UNIV OF ALABAMA	Y	5500	NA	5800	0	5800	20	9.06
UNIV OF ARIZONA	N	2853	2853	2853	990	1863	10	5.82
UNIV OF CALIFORNIA-BERKELEY	N	7434	9770	7434	1406	6028	20	9.41
UNIV OF CALIFORNIA-LA	N	7484	8559	8000	1347	6653	20	10.39

UNIV OF COLORADO-HOULDER	Y	6490	6490	6490	296	6194	20	9.67
UNIV OF DELAWARE	N	6625	7330	6970	94	6876	20	10.74
UNIV OF FLORIDA	N	4652	4652	4652	951	3701	13	8.89
UNIV OF GEORGIA	U	5731	6113	5922	1362	4560	13	10.96
UNIV OF ILLINOIS-CHAMPAIGN	Y	5250	5400	5359	254	5105	20	7.97

UNIV OF MARYLAND-COLLEGE PARK	N	7174	9790	7200	1885	5315	20	8.30
UNIV OF N.CAROLINA-CHAPEL HILL	N	5500	5500	5500	769	4731	10	14.78
UNIV OF NEBRASKA-LINCOLN	Y	5250	5250	5250	201	5049	15	10.51
UNIV OF OKLAHOMA	N	7100	7100	7100	497	6603	20	10.31
UNIV OF SOUTHERN CALIFORNIA	Y	7132	7900	7516	182	7334	20	11.45

the most recent report published in the Bulletin of the American Meteorological Society, Vol. 66, No. 8, August, 1985.

Table III. University faculty salaries (in dollars): 1980-84*.

Rank		Year			Average annual growth: 1980-84 (%)
		1980	1982	1984	
Professor	Highest	49,173	54,858	65,100	8.1
	Lowest	36,670	40,744	43,896	4.9
Assoc. Prof.	Highest	33,174	37,754	43,872	8.1
	Lowest	29,071	32,819	34,488	4.7
Asst. Prof.	Highest	26,737	30,513	33,840	6.6
	Lowest	22,739	26,504	27,804	5.6

* 1980, 1982 data taken from, respectively, Thompson (1981) and Kimpel (1983).

Salary figures represent the mean values of the highest and lowest paid meteorology faculty in each rank.

Given the quality of the faculty, if a serious disparity were to exist, the faculty could be vulnerable to more lucrative offers. We are not in a position to evaluate this, but recommend an internal assessment and evaluation.

VIII. Summary Statement and Recommendations

Our evaluation has been divided into seven (7) parts: 1) Role and Mission of Program, 2) National Perspective of the Program, 3) Faculty, 4) Students, 5) Facilities, 6) Supplemental Support, and 7) Budgetary Considerations. In each section we have interjected at the end any thoughts we had on recommendations that might be considered. Thus, these sets of specific recommendations are not repeated.

Our evaluation has concluded that the Ph.D. Climatology Program ought to be granted permanent status.

The faculty have built up a strong and viable research program, excellent care of students, and recognized expertise among faculty elsewhere in the university (by virtue of desire of some of these faculty to be part of the

program).

We urge the maintenance of these excellent traits of the program. As with any program, there are needs and many ways to further program goals. Several have been identified in our opinion and are specified in recommendations at the end of various sections of this report.

Rev. Sept. 18, 1986

University of Delaware

Proposal: Master of Arts in Liberal Studies

A. Origination

This proposal originates with the Faculty Committee to Consider a Master of Arts in Liberal Studies Program, appointed 10 December 1984 by Dr. Richard B. Murray, Associate Provost for Graduate Studies, and Dr. Helen Gouldner, Dean, College of Arts and Science. Committee members are Professors Theodore Braun (Languages and Literature), Heyward Brock (English), James Curtis (History), Jay Halio (English), William Homer (Art History), John Hurt (History), Juan Villamarin (Anthropology), Barbara Ward (Early American Culture), David Norton (Philosophy), chair.

The proposal has benefitted from extensive consultations with Dr. Allie Frazer, President, The Association of Graduate Liberal Studies Programs; Dr. Bonnie Erickson, Director, Master of Arts in Liberal Studies Program, Duke University; Dr. Ronald Witt, Advisory Committee, MALS Duke University; Dr. David B. House, Director, Master of Liberal Studies Program, Johns Hopkins University; and Dr. Eileen Kennedy, Program Coordinator, Master of Arts in Liberal Studies Program, Kean College, Union, New Jersey.

B. Rationale

The MALS concept was introduced in the late 1950s in degree programs in such institutions as Johns Hopkins, Wesleyan University, St. John's College, and the New School for Social Research. In 1975 the Association of Graduate Liberal Studies Programs was founded by twelve charter institutions: Johns Hopkins University, Southern Methodist University, the University of Southern California, Hollins College, Wesleyan University, Boston University, Dartmouth College, the New School for Social Research, St. John's College, the University of Oklahoma, and Georgetown University.

Today AGLSP has over seventy Member and Associate Member institutions, and the degree is offered by more than 100 colleges and universities across the country.

Our proposed MALS is an interdisciplinary degree encompassing the departments of Anthropology, Art History, Early American Culture, English, History, Languages and Literature, Linguistics, and Philosophy. After three years of operation, consideration will be given to the inclusion of the social sciences and the natural sciences.

MALS is intended in the first instance for adult, vocationally established persons who recognize inadequacies in their formal education and look to the program for personal intellectual enrichment. A typical example is an engineer, scientist, or business executive who seeks an enriched knowledge of his/her Western cultural heritage. Another example is a vocationally established individual who for the first time has the luxury of enjoying learning for its own sake.

Experience has shown that such students are ill-served both by undergraduate extension courses, offered in no particular order and largely at the introductory level, and by professionally oriented post-baccalaureate degree programs.

The degree also has appeal for school teachers who are often required to teach courses in more than one subject, and it can be expected to attract direct from undergraduate education some students who seek breadth of understanding rather than disciplinary focus.

University faculty in the program can expect to grow by interaction with mature, committed, self-disciplined students who possess considerable knowledge of dimensions of life outside the classroom and its designated courses of study.

By rigorous recruitment and screening of both prospective students and faculty, the unrelenting aim of the program will be to maintain a teaching-learning experience of exceptionally high quality. A deserved reputation for excellence, both in the university community and in the community at large, is imperative.

C. Need

The primary market-area for the program is envisaged as a circle centered upon Newark, whose radius is a few miles short of both Philadelphia and Baltimore, extended by a southern loop to include the whole of Delaware. Demographically this area is rich in professionals of the projected MALS sort--business executives, public administrators, engineers, scientists, bankers, advertising executives, etc. The 1984 start-up of the Duke University MALS program in a comparable area demographically suggests that with appropriate publicity an MALS program at the University of Delaware can expect applications on the order of two to three times the 20-30 students targeted as the beginning enrollment.

A market survey conducted in 1977 by the College of Urban Affairs for an MALS initiative at that time concluded that prospects for the program numbered many hundreds. The survey has not been repeated for the present proposal. It is felt that successful MALS programs at many colleges and universities in areas demographically comparable to ours is a more reliable indicator of the desirability of such a program here than are market survey instruments.

D. The Curriculum

As indicated under "B. Rationale," the scope of the program in its first three years encompasses the departments of Anthropology, Art History, Early American Culture, English, History, Languages and Literature, Linguistics, and Philosophy, with the possible widening after that period to include the social and natural sciences. The narrower scope of the first three years will be tested to determine whether it affords sufficient latitude for the needs targeted by the program ("B. Rationale"). At the same time the narrower initial scope will help, with advisement, to secure coherence in the programs of individual students.

Two principles are incorporated in curriculum design:

- (1) As a degree program, MALS should have structure and coherence. Courses should not be merely an unrelated aggregation of seminars, but should interrelate, complementing one another. This will be achieved by close and careful advisement of MALS students by faculty and Director, taking into account the distinctive interests of individual students and directed toward the Master's Essay or Synthesis Project.
- (2) The educational experience for students must be in significant measure a communal experience. This feature distinguishes MALS from adult education programs that rely wholly on self-directed, independent study.

These principles are incorporated primarily by the use of core courses and program electives, designed for MALS by MALS faculty, and by advisement of MALS students.

Given the full-time employment of MALS students, MALS courses will be offered primarily in the late afternoon and evening, and perhaps on Saturday mornings, in Fall, Winter, Spring, and Summer sessions.

The Format

Core Courses: Two "core courses" are required of all MALS students. The first is an Introductory Seminar in Interdisciplinary Study and the second is an Advanced Seminar in Interdisciplinary Study. The former is an introduction to interdisciplinary methods, exhibited in the study of the designated course subject-matter. The latter is the extension and refinement of methods in which students have acquired some competence. At least one Introductory Seminar will be offered each Fall, and at least one Advanced Seminar will be offered each

Spring. Beyond the requirement for one Introductory and one Advanced Seminar, students may elect to take additional Core Course offerings.

Descriptions of two Introductory Seminars and two Advanced Seminars appear on p. 5. Core course offerings will be subject to review and significant revision after three years.

Program Electives: Like core courses, program electives are designed for the MALS program. At least four program electives will be offered during the tenure of every student, of which the student is required to take at least two. While not necessarily interdisciplinary in character, program electives serve the ends of liberal studies. For example, a course built around great works in ethical theory, or economic theory, presupposes no prior training in philosophy, or economics, yet affords significant insight into the development of Western civilization.

Descriptions of four proposed Program Electives appear on pp. 5-6.

General Electives and Tutorials: The entire range of graduate offerings and Special Problems from participating departments is available to MALS students, under advisement by the MALS Director, and with consent of the instructor. Specific prerequisites for given courses will of course be applicable.

Master's Essay/Synthesis Project: Students are expected to declare a general area of interest on entering the program. As soon as possible but no later than the start of his/her penultimate semester, each student decides upon the general subject for either a Master's Essay or a Synthesis Project, for six credits. The Master's Essay is a work of academic research and writing, while a Synthesis Project may be a creative work or a work of research application in a community. The purpose of the essay or project is to provide individual students with a means of focussing the interests, goals, and courses of study that comprise their programs. Students will work closely with faculty advisors on their essay or project, and participate in a colloquium convened by their advisor to discuss progress on their work. Cooperative work among two or more students is encouraged where its advantages can be shown.

Thirty credits, including Master's Master's Essay or Synthesis Project, are required for the MALS degree.

Proposed Core Courses

- MLS* 601: Introductory Seminar in Interdisciplinary Study: "Humankind's Place in Nature." Analytical study of Western views of the natural world and our relationship to it, as reflected in literary, artistic, philosophical, and scientific sources from the ancient Greeks to the present. Emphasis upon the contrast between view of humanity's "at homeness" in nature and depictions of its essential alienation from nature.
- MLS 602: Introductory Seminar in Interdisciplinary Study: "Imagination: The Necessary Angel." The place of imagination in scientific discovery, artistic creation, and moral life. Autobiography of discovery and creation, e.g. Leonardo, Kekule, Poincare. Theories of imagination. Cultivation of imagination; application to problems of ordinary life.
- MLS 621: Advanced Seminar in Interdisciplinary Study: "The Classical World." Hellenic ideals of beauty, excellence, proportion, learning, and love, as a unified cultural sensibility, serving as the fountainhead of Western civilization.
- MLS 622: Advanced Seminar in Interdisciplinary Study: "The Enlightenment Sensibility". Delimited by the British "glorious Revolution," the French Revolution, and the American Revolution, the sensibility of the Enlightenment as embodied in ideals of clarity, utility, civility, and humanity. Inception of these ideals and their continuing influence.

Proposed Program Electives

- MLS 610: "Human Moral Development." Theories of individual and collective moral development from the Vedas and Upanishads, Socrates, Plato and Aristotle, Marx, Freud, Erikson, Kohlberg, and Gilligan. Analytical study of evolutionary and revolutionary change. Stages of life and epochs of history. Values, virtues, and responsibilities of each stage of life.

*This new course code is to be applied for.

- MLS 611: "Magic, Science, Religion, Philosophy."
Study of the essence, aims, methods, and limitations of each, as alternative ways of organizing human experience. Complementarities among them. Positivist hypothesis of historical succession from magic and religion to philosophy to science. Thesis of separate domains. Thesis of "de-sacralization" of modern life.
- MLS 612: "Individualism and Community in American Life."
Four strands of traditional individualism in American life: religious individualism (Winthrop); republican individualism (Jefferson); utilitarian individualism (Franklin); expressive individualism (Whitman). Effects upon community, tensions between individuality and social interdependence; between individuality and tradition (Emerson, Thoreau). Issue of privatization (Tocqueville), and decline of intermediate organizations (township, church, extended family).
- MLS 613: "The Renaissance Sensibility:
Emergent "humanism" of the Renaissance, in changing ideals of man, society, and cosmos. Study of its expression in literature, art, philosophy, science, politics, and daily life. Focus upon such key figures as Leonardo, Erasmus, More, Shakespeare, Michelangelo, Lorenzo d'Medici.

E. Admissions

Admissions requirements for MALS will be generally consistent with corresponding requirements for graduate programs in the College of Arts and Science, with certain added features to take account of the maturity and experience of MALS applicants. General requirements are:

- 1) a bachelor's degree from a regionally accredited college or university:
- 2) a grade point average of 3.0 or above in the undergraduate major:
- 3) three letters of recommendation
- 4) An autobiographical essay
- 5) An interview with the Director and such members of the Advisory Committee as the Director may have reason to invite.

The essay and interview are for the purpose of evaluating candidates as individuals, in terms of distinctive needs, abilities, and aims. For example, some adult students may have performed at lower levels as undergraduate students, but have subsequently matured into highly motivated learners. Some may possess a B average, but in non-liberal arts fields. Again, courses taken a decade and more ago at good institutions were not subject to the recent grade inflation, and some undergraduate records must be evaluated in this light. Extra-academic abilities, experience, and achievements will be weighed.

Therefore provision is made for conditional admission. Applicants whose GPA fell below 3.0 in the undergraduate major, but above 2.5, may be conditionally admitted if there are strong mitigating or compensatory factors. They will be required to complete two 600-level courses, or the Introductory Seminar in Interdisciplinary Study, with the grade of A or B, and to supply written evaluations by the faculty in question, for admittance to full standing. Provisional status is not automatically converted to full standing. Failure to meet the stated conditions will mandate withdrawal from the program.

Admission will be decided by the Director in consultation with the Advisory Committee.

F. Advisement

Close advisement of MALS students will be the policy of the program, the Director, and the faculty. The general aims of advisement are to secure a spirit of community among MALS faculty and students, to achieve cohesiveness in students' courses of study, to insure progress by students toward distinguished results, to commensurate student needs and program opportunities, and to avoid course-choices among departmental seminars for which given students may be fatally unprepared.

G. Administration

Administration of the program will rest with the Director and the Advisory Committee.

The Director will be full-time, and will normally teach one course per semester in the program. Preferably s/he will be a tenured faculty member of a participating department. S/he will report to the Dean of the College of Arts and Science.

The Advisory Committee will be advisory to the Director, and will consist of one faculty member from each participating department, with additional appointments on the basis of special expertise to be made at the discretion of the Director.

The Advisory Committee will review applicants; recommend on candidacies for admission; conduct continuous curriculum review and planning; approve thesis or Final Project themes and appointment or essay and Project committees; review course proposals by faculty; and recommend students to the Dean for award of the degree.

The Director will administer the program in the above respects, will be responsible for recruitment of faculty and students and will also be responsible for the public relations of the program in the community, including media recognition, market cultivation, and cultivation of business and industry support, e.g. in the form of released time for employees, perhaps eventual tuition payment, etc. S/he will issue detailed annual reports on the program to the Dean, the Associate Provost for Graduate Studies, and the Advisory Committee.

H. Evaluation Format

Total Program: In accordance with University of Delaware procedure, as a new graduate program, MALS will be evaluated by external examiners after four years, with the report to be assessed by all stations in the approval procedure.

Courses: Control of course quality will begin with the selection of teachers of recognized excellence, in most cases experienced at interdisciplinary teaching. Each MALS course will be evaluated by students at its conclusion. In addition each teacher will assess his/her course upon completion with the Advisory Committee, indicating accomplishments and how they were achieved, together with analysis or perceived deficiencies in the course, the teaching, and the students.

I. Resources

The program will be administered without drain on resources of participating departments. Teaching will be done on overload, or on-load with full compensation to departments. With a start-up target program enrollment of 20-30 students, and a mandatory first course, the effect of the program on departmental seminars will be insignificant.

Sample Program	Credits
MLS 601: Introductory Seminar in Interdisciplinary Study:	
Humankind's Place in Nature	3
MLS 610: Human Moral Development	3
MLS 621: The Classical Sensibility	3

	9
MLS 612: Individualism and Community in American Life	3
PHL 666: Reformation Theology	3
EC 603: History of Economic Thought	3
H 644: Studies in Renaissance History	3
MLS 622: Advanced Seminar in Interdisciplinary Study: The Enlightenment Sensibility	3
Master's Essay: "Central Presuppositions of Modern Economic, Political, and Moral Individualism"	<u>6</u>
	30

CONFLICT OF INTEREST INFORMATION REVIEW

A Synopsis of Existing University Policies on Conflict of Interest

General Discussion

Conducting high quality research is integral to the primary missions of a University--educating students and discovering, preserving, and disseminating knowledge. Thus, University policy encourages both public and private support of research programs through grants and contracts. Similarly, the University recognizes the value of outside consulting by faculty, both to the community and to the faculty members themselves, and encourages such consulting on a limited basis (one day in five, noncumulative, unless special arrangements are made with the appropriate dean and approved by the Provost). However, the pursuit of even such worthy activities as grant-supported research and outside consulting can come into conflict or appear to come into conflict with other legitimate University interests.

It should be noted here that outside consulting as part of the five-day work week is a privilege extended to faculty members only; however, all other aspects of potential conflict of interest apply to all University employees. Since "All regular members of the teaching staff of the University are fully engaged for the whole year of fifty-two weeks" (Faculty Handbook III-A-1), it follows that the one-day-in-five limitation on the consulting privilege applies throughout the year unless special arrangements are made.

Potential conflicts of interest or the appearance of conflicts of interest may be complex and may involve ethical considerations. These include financial considerations; priorities in distribution of time and effort; guidance of students' research; guidance of contractual research; consulting; contractual obligations to research sponsors, both governmental and private; and access to privileged information. These diverse considerations and the many interactions among them must be addressed in light of the University's designated missions. Even when behavior itself is exemplary, the appearance of conflict of interest should be avoided.

Both outside consulting and outside research support lead inevitably to awareness of privileged information on research, business, and timing objectives, and on progress toward these objectives. University policy stipulates that employees should not use their knowledge of privileged information for personal gain and should not disclose such information to third parties. Further, to avoid potential adverse publicity and negative consequences to the University, to research sponsors, or to users of consulting services, University policy stipulates that privileged information should not be disclosed even when personal gain is not involved.

To minimize the potential for the appearance of conflict of interest, "a faculty member must keep the department chairman and the dean fully informed on the nature and extent of each arrangement that involves outside professional service." (Faculty Handbook, section III-H-1) To this end, employees shall disclose, on a confidential basis, the following types of outside financial, business, or consulting involvements:

1. names of companies or organizations for which consulting is done for remuneration;
2. "for-profit" companies or organizations in which the employee is an officer, an executive, or a director;
3. companies in which the employee has a significant financial investment;
4. outside part-time employment of a professional nature;
5. existence of a private business or a consulting firm formed by the employee; and
6. "course-type activities" (e.g., teaching) outside the University.

It should be noted that items 4, 5, and 6 above require approval from the University President as stated in the Faculty Handbook, sections III-A-1 and III-H-1, but even with this approval the potential for conflict with other interest areas of the Conflict of Interest Checklist must be considered.

If in the dean's judgment there is no reasonable potential for perception of conflict of interest, the above disclosures may be treated as personal and confidential unless the employee requests that a record be kept.

If the dean believes that conflict of interest might be perceived, he or she will request that written disclosures be filed. Appropriate written disclosures of potential conflicts of interest are to the advantage of the employee because disclosure is evidence of good faith and of the intent to avoid activities having the potential for abuse such as those listed in the Conflict of Interest Checklist.

The many diverse demands on an employee's time necessitate setting personal priorities. Overcommitment of time or seriously unbalanced time priorities can lead to conflict of interest. Overcommitment is of particular concern when it diminishes teaching and guidance of student research and when it impairs the University's ability to fully provide the time and quality of effort specified in research agreements. In recognizing commitments and in setting priorities it must be stressed that the employee's first responsibility is to the University and its educational mission.

Multiple projects in a researcher's field of interest are another potential source of conflict of interest. Such efforts can be mutually beneficial, but one project should not be conducted at the expense of another in terms of both human and material resources. To avoid problems in this area, when new research programs are initiated, their objectives should be considered in light of ongoing work. Disclosure of the general research area (not confidential or proprietary details) of one sponsor to another is also helpful. With consultation clients, care should be taken to give advice that is objective and not slanted toward research program goals; conversely, research program goals should not be altered to fill consultation client needs. In short, if consultation clients and research sponsors are each informed of commitments involving the other, these conflicts of interest can be avoided.

Conflict of Interest Checklist

Interest Areas

- Guiding student research and learning
- Research sponsored by the University
- Research sponsored by government
- Research sponsored by industry
- Research sponsored by private organizations
- Consulting for government
- Consulting for industry
- Consulting for private organizations
- Consulting on other faculty members' grants or contracts
- Outside employment
- Operating a personal business
- Operating a consulting business
- Participating in management of a business
- Participating in University purchasing decisions
- Personal financial investments

Activities with the Potential for Abuse

- Allocating time and effort improperly
- Allocating resources improperly
- Overcommitting
- Influencing research directions and objectives improperly
- Losing objectivity of consulting advice
- Leaking privileged information

Potential Adverse Results

- Unjustified personal gain
- Financial gain to any party other than the party supporting the work
- Unfavorable publicity for the University
- Unfavorable publicity for any party, including the employee
- Unfair advantage in planning, in research decisions, or in business decisions
- Damage or disadvantage to any party including students, the University, research sponsors, or the public

Methods of Avoiding Abuses

- Appropriate disclosures to sponsoring parties, clients, and employers
- An independent opinion (for example, the dean's) on full disclosures (with such disclosures confidential and unrecorded when appropriate, and recorded for future reference when appropriate)
- Continuing personal vigilance and integrity

Conflicts of Interest

Many of the activities described in the following list are specifically prohibited by Federal law or by University policy. Others are situations which are inherently unethical. A conflict of interest is a conflict of interest even if no wrongdoing actually occurs, and even those examples where no wrongdoing is intended should be avoided to preclude the perception of wrongdoing and to protect the reputation of the individual and the University.

1. using or releasing privileged information for personal or third-party gain;
2. altering the focus of a research program for the benefit of one's outside interests or for financial gain;
3. obtaining personal gain by influencing purchases of equipment, instruments, etc.;
4. influencing the negotiation of contracts for inappropriate personal or third-party benefit;
5. compromising the educational benefit of student research to obtain results supporting outside interests;
6. using more than one day in five for outside consulting;
7. accepting outside employment which might impair independence of judgment in the performance of University duties and responsibilities;
8. accepting money, goods, services, entertainment, or any form of gratuity either directly or indirectly from any individual or company interested in business or financial relations with the University.
9. having personal investments in any business entity which could create a substantial conflict between those private interests and University duties;
10. accepting gratuities or special favors in return for influencing the conduct of research;
11. overcommitting time so that a contract or grant does not receive the time or effort called for by the agreement;
12. consulting for one or more government agencies or their contractors in the same technical field as one's current government-supported research project, which may result in giving advice of questionable objectivity (Federal Conflict of Interest Statutes, 18 U.S.C. 202-209 as amended);
13. consulting for compensation on any University research project;

14. receiving compensation for tutoring University students outside the approved tutorial program;
15. compromising the quality of education at the University by improperly allocating time and effort to the University.

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