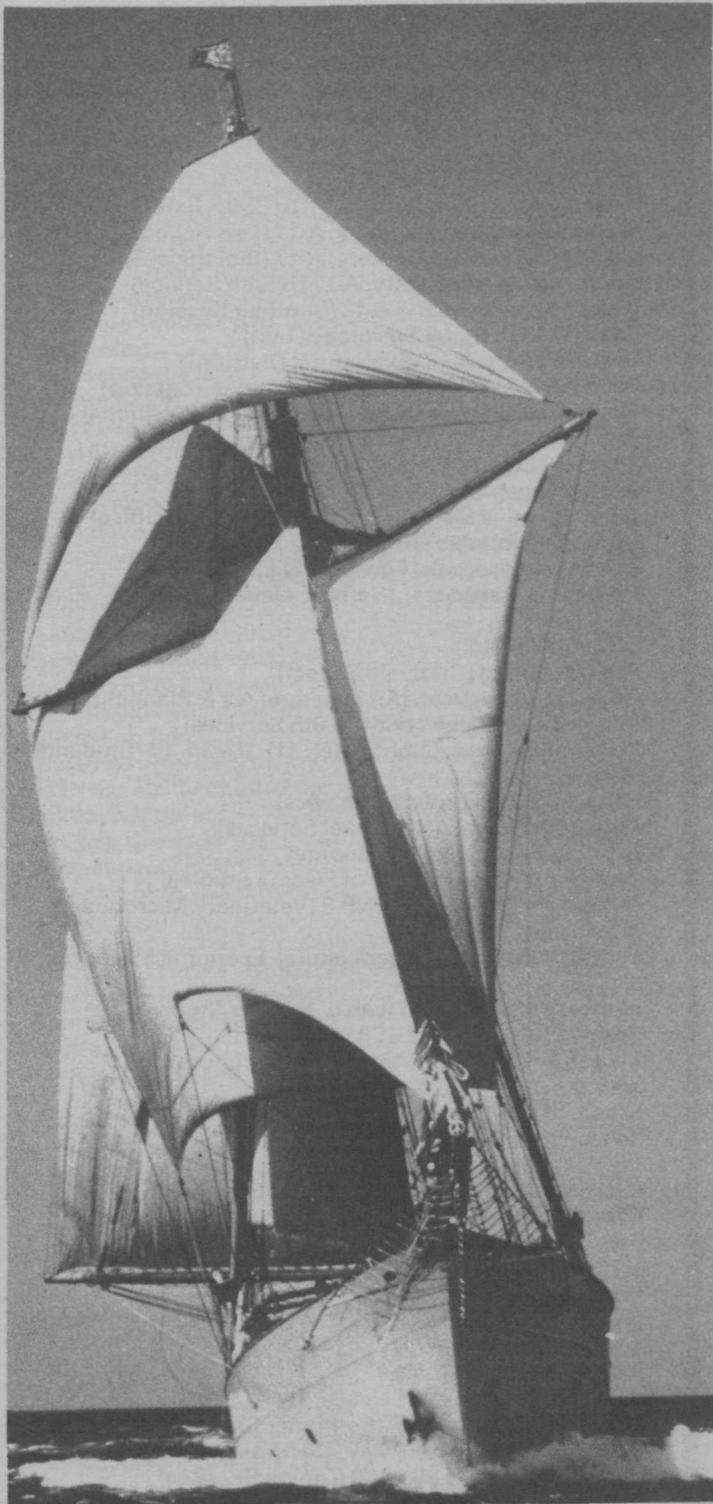




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The research vessel Westward will embark on a new educational venture for Cornellians this summer—the "SEA Semester."

Joint Program with SEA

Summer on Ocean Offered at Shoals

Earlier in our nation's history, young men who wanted an education frequently sought it by running away to the sea to work as apprentices on high-masted schooners, sailing to remote ports.

Today, thanks to a new cooperative venture of Cornell's Shoals Marine Laboratory and SEA (Sea Education Association), men—and women—may enroll in a "SEA Semester" to learn about the ocean first-hand once again, as apprentices aboard the 100-foot sailing and research vessel "Westward."

Students participating in the new "SEA Semester" will earn a total of 16 credits on a Cornell University transcript by successfully completing three courses in a total of 13 weeks this summer: "Introduction to Marine Science" and "Introduction to Nautical Science," taught at the Shoals Lab, Appledore Island, Maine, and a seven-week "Seagoing Apprenticeship" aboard the research vessel "Westward," owned and operated by SEA, a non-profit educational institution located in Boston.

Continued on Page 18

'75-76 Budget Has Cuts, Tuition Hike

Reductions of \$2.3 million in operating costs and a 10 per cent tuition increase for most units are key components of the 1975-76 Cornell University budget approved by the University's Board of Trustees, meeting in New York City over the weekend.

President Dale R. Corson presented the budget, which contains "basic strategies including necessary tuition increase, enrollments, financial aid allocations, use of capital and cost reductions." Allocations have been established for each of the colleges, the library, and most other parts of the academic program. Detailed

budgets for support and plant services are still being developed within the overall allocations approved and will be brought before the board in March.

Including both restricted and unrestricted categories, the 1975-76 budget for the endowed colleges at Ithaca calls for total income of \$126.5 million and expenses of \$127.8 million, with a deficit of \$1.3 million. Expected endowed college totals for the current year, 1974-75, are \$118.6 million income, \$120.4 million expense, with a deficit of \$1.7 million (see story on status of 1974-75 budget on Page 12.)

Some \$68.8 million of the 1975-76 total expenses are charged to general purpose funds. Corson said inflation has increased costs covered by general purpose funds by at least \$4.3 million for the endowed colleges and that the University "continues to face needs for increased expenditure to meet social and environmental legislation, to house expanded library collections, to meet plant maintenance and debt-service costs, and to assume costs of programs which heretofore have been financed from foundation

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Establish Priorities, Trim Programs

Corson Tells Cost-Cutting Policies for Next 3 Years

Cornell President Dale R. Corson has detailed the plan of action the University will follow over the next three years to establish priorities and trim programs to fit resources

in the face of the current financial situation.

Corson presented his program to the University Board of Trustees at its annual midwinter meeting in New

York City which ended Saturday (Jan. 18). The president's program, contained in a 13-page memorandum, was also mailed to the deans, to each member of the University Faculty and to members of the University Senate.

Corson in his program answers the question, "What has to be done?" The answer is "We must increase the efficiency of our present operation, particularly in administrative and other support areas. We must increase our revenues by every reasonable means and we must reduce the scope of our operation."

"The decisions necessary to bring about the required changes will be painful in the extreme," Corson said. "They can only be made by the University president, but they cannot be made precipitately nor can they be made without the input, the help and the advice of the best thinking in the entire University community."

He said one of the first tasks was a determination of the magnitude of the dollar gap which the University needs to fill. He said his estimate indicates that some 15 per cent of that portion of the University's operation which is supported by general purpose unrestricted funds must be cut. This percentage, if correct, Corson said, represents some \$10 million in 1974 dollars. (This figure includes the \$2.3 million cut scheduled in the 1975-76 budget.)

Corson said there were a number of principles upon

Capital Financing Report Approved

A report of a Cornell trustee ad hoc committee on capital financing was approved Saturday (Jan. 18) by the University Board of Trustees.

Chairman of the committee, Trustee Stephen Weiss, said that the sole purpose of the report is to help assure the integrity of Cornell in order to enable it "to continue its educational mission with distinction in this period of unprecedented financial stress."

The committee noted that the recent inflationary period is harmful to society as a whole, but particularly to private higher education, which has limited resources for increasing its income.

According to Weiss, the recommendations of the committee are designed to "sustain Cornell's strength in light of financial economic challenges." At the same time, he said, "Without a stronger commitment of public support, there is little possibility of maintaining the present level of excellence in colleges and universities such as Cornell. We will cooperate with other

major educational institutions, must make every effort to increase the level of government support."

The report makes recommendations on a wide variety of subjects such as "equilibrium," "liquidity," "contingency planning," "external funding," "gift policies," "objectives for invested funds" and "debt." The committee report states, however, that "more important than any single recommendation is the general need to realize that these are not ordinary times."

The report is the culmination of more than seven months of study and deliberations. Appointed last summer by Board Chairman Robert W. Purcell, the scope of the committee's work expanded as the national economy deteriorated and Cornell's financial problems multiplied.

Reporting that Cornell, like American society in general, "has entered an era of shrinking expectations," the committee suggests that "the question which Cornell faces as the year

Summary Journal

Board of Trustees Meets

Following is the summary journal for the meetings of the Executive Committee and the full Board of Trustees of Cornell University held Jan. 16, 17, 18, 1975 in New York City.

NOTE: This summary journal, as released for publication, does not include confidential items which came before the meeting.

1. The minutes of the Executive Committee meetings held Nov. 12 and Dec. 10, 1974, were approved as were the minutes of the Board of Trustees meeting held Oct. 11-12, 1974. The minutes of the Executive Committee meetings of Sept. 10 and Oct. 10, 1974, were ratified and confirmed.

2. The report of the Trustee Ad Hoc Committee on Capital Financing, chaired by Trustee Stephen H. Weiss, was presented to the board. The board approved the report and asked University President Dale R. Corson to implement it, making specific recommendations to the Executive Committee where appropriate. The board also requested that the president report back to the full board annually regarding progress in meeting the recommendations. It discharged the committee with thanks and appreciation.

3. President Corson reported to the trustees on the state of the University. In doing so, he discussed the current financial scene and its implications for Cornell. He outlined the task which must be accomplished, the principles upon which priorities must be built and the methodology and the timetable he proposes for the establishment of priorities.

4. University Treasurer and Chief Fiscal Officer Arthur H. Peterson reported on the current financial position of the University as it pertains to the endowed colleges at Ithaca, the Medical College and related activities.

5. The president, along with University Provost David C. Knapp, Vice President for Administration Samuel A. Lawrence and Vice President for Medical Affairs Dr. E. Hugh Luckey, presented the proposed budgets for the 1975-76 fiscal year as recommended by the president for the endowed colleges at Ithaca, the Medical College and the School of Nursing. The budgets were adopted by the trustees.

6. In other budgetary actions, the trustees approved the president's recommendations concerning a change in the policy regarding distribution of income from the capital fund, a supplemental appropriation for the Medical College to cover, for the most part, increased operating, maintenance and other costs, and a policy with respect to disposition of unrestricted bequests.

7. The trustees authorized the University administration to obtain a restaurant type liquor license for the Griffis Faculty Club at the New York Hospital-Cornell Medical Center in order to expand the club's potential to visitors, pa-

tients' families and University and Hospital personnel.

8. The president recommended, and the trustees approved, adding the name of the Campus Store business manager to the list of those authorized to sign on two Campus Store checking accounts.

9. The trustees, upon the president's recommendation, authorized the University administration to proceed with the improvement of outdoor lighting on the endowed college campus by converting up to 200 incandescent fixtures to mercury vapor. This conversion would be funded by a fund advance which would be reimbursed out of savings to be realized because of the conversion over a three-year period.

10. The trustees approved the president's recommendation that three acres of farm land which is unsuitable for research in the Town of Dryden near Freeville be sold to a private party.

11. The trustees heard a report from the Buildings and Properties Committee given by its chairman, Trustee Bruce Widger. The University administration was authorized to proceed in hiring a design consultant for conversion of portions of the "S" Building at the Medical College to facilities for the School of Nursing.

12. The president recommended approval of the University administration's action in submitting a proposal to the National Science Foundation requesting continued support in the amount of \$4.1 million for a one-year period (3. 1. 75 to 2. 29. 76) for the Wilson Synchrotron Laboratory. The trustees approved the action.

13. The date of the Executive Committee meeting scheduled for May 13 in New York City was changed to May 14 to coincide with the Tower Club dinner and therefore conserve trustee and staff time and expense.

14. The annual report of the Audit Committee was given by Trustee Richard F. Tucker, committee chairman. He reported that the University's public accountants, Haskins and Sells, considered Cornell to be "a leader among educational institutions in adopting the new (Industry Audit Guide and National Association of College and University Business Officers) accounting principles." The audit report also said that Haskins and Sells urged that, although decentralization of accounting at Ithaca is a long-standing tradition, steps be taken toward more centralization of accounting functions in Day Hall and increased Day Hall control over these functions.

15. Vice President for Research W. Donald Cooke reported on the status of sponsored research at the University.

16. The president recommended a series of personnel actions which were approved.

17. The president asked for

confer degrees on Jan. 22, June 2 and Aug. 27, 1975, upon candidates who will have fulfilled all necessary requirements, all in accordance with the recommendation of the respective faculties.

18. The president reported for the information of the trustees on deaths and resignations in the University faculty.

19. Vice President Cooke reported on the use of the senior lecturer and lecturer titles. The trustees had asked for such a report after the University had experienced use of the titles for several months. He reported that the general responsibilities of both positions are primarily, if not entirely, in teaching. The senior lecturer title was created for those individuals with professional qualifications of experience and/or education generally comparable to associate professor or professor. There are four senior lecturers in the statutory units and three in the endowed colleges. The lecturer title is used for those individuals with professional qualifications of experience and/or education generally comparable to those of instructor or assistant professor. There are 95 such lecturers in the endowed colleges and 36 in the statutory colleges. Since the redefinition of the lecturer position and the establishment of the senior lecturer title, a new position, that of teaching associate, has been established for those who aid in teaching a course but don't have responsibility for it. It has been used primarily in language and science laboratories.

20. The trustees considered the possible attendance of the speaker of the University Senate at trustee meetings. After discussion, the matter was left to the discretion of the board chairman and the Executive Committee chairman. The current Senate speaker, Robert S. Harrison, was invited to observe the Jan. 16-18 meetings.

21. The trustees adopted, upon the president's recommendation, "Trustee Guidelines for College Advisory Councils." The guidelines were based on a staff study of these councils as well as on consultation with trustees and deans. The guidelines seek to provide uniformity in the functioning of the councils. They provide for regular reporting of council findings and activities to the council chairman and to the president. Further, they give each council an opportunity to report on its activities to the Board of Trustees. The trustees asked the University administration to review, in a similar manner, all other councils and boards such as those for athletics and the Johnson Museum.

22. The trustees, upon the president's recommendation, recognized the concept of part-time faculty appointments at both the tenure and nontenure levels and approved the necessary legislation to pro-

Job Opportunities At Cornell University

The following are regular continuing full-time positions unless otherwise specified. For information about these positions, contact the Personnel Department, B-12, Ives Hall. Please do not inquire at individual departments until you have contacted Personnel. An Equal Opportunity Employer.

PART-TIME AND TEMPORARY POSITIONS
(All part-time positions are also being listed with Student employment)

POSITION (DEPARTMENT)

Admin. Asst. I (Personnel), NP-16 (Coop. Exten. Admin.)
Sr. Administrative Secretary, A-17 (Law School (¾ time))
Sr. Administrative Secretary, A-17 (Biological Sciences)
Administrative Secretary, A-17 (Health Service)
Department Secretary, A-13 (Summer Session)
Steno II, NP-6 (Rural Sociology (1 yr))
Principal Clerk, A-14 (Extramural Division)
Searcher I, A-13 (2) (University Libraries - Catalog)
Searcher I, A-13 (University Libraries - Acquisitions)
Account Clerk, NP-6 (Agricultural Engineering)
Shipping Clerk, A-12 (Lab of Ornithology)
Sr. Key Punch Opr., A-13 (Accounting)
Administrative Manager I (Endowed Payroll Office)
Librarian (Libraries - Acquisitions)
Extension Associate (Agricultural Engineering)
Extension Associate (Human Development & Family Studies)
Editor (NYSSILR)
Assistant Dean (Graduate School)
Assistant to the Dean (Architecture, Art & Planning)
Administrator (University Health Services)
Residential Area Coordinator (1) (Dean of Students - Housing)
Head Coach of Football (Athletics)
Associate Director (Personnel Services)
Extension Associate (Agronomy)
Technical Aide, A-17 (Lab of Plasma Studies)
Laboratory Technician I, NP-8 (Veterinary Microbiology (1 yr))
Research Specialist (Agricultural Economics (approx. 1 yr))
Research Associate (7) (Lab of Nuclear Studies)
Research Associate (3) (CRSR)
Research Associate (Agricultural Economics)
Research Associate (Food Science)
Research Associate (Vegetable Crops)
Research Associate (LASSP (1-2 years))
Research Associate (Entomology)
Research Associate (Lab of Plasma Studies (1 yr))
Research Associate (Electrical Engineering)
Experimental Machinist, A-19 (Lab of Nuclear Studies)
Sr. Electronics Technician, A-21 (Chemistry)
Sr. Electronics Technician, A-19 (Biological Sciences)
Postdoctoral Associate (2) (Genetics, Dev. & Physiology (1 yr))
Patrol Officer (2) (Safety)
Programmer III, A-23 (Science, Tech., Society)
Systems Programmer II (Computer Services)
Dining Manager, A-21 (May '75) (Dining Services)
Short Order Cook I, A-14 (2) (Dining Services)
Curatorial Asst., A-16 (History of Art)
These are all permanent full-time positions unless otherwise specified.

PART-TIME AND TEMPORARY POSITIONS
(All Temporary and Part-time positions are also listed with Student Employment)

Administrative Assistant, A-22 (B & PA (perm. p/t))
Department Secretary, A-13 (Treasurers (temp. f/t))
Steno II, NP-6 (Agronomy)
Steno II, NP-6 (N.E. Regional Center for Rural Development (perm. p/t))
Steno II, NP-6 (Education (temp. f/t))
Steno I, NP-5 (Rural Sociology (1½ yrs. p/t))
Account Clerk, A-13 (Dining Services (perm. p/t))
Sr. Electronics Technician, A-19 (2) (National Astronomy & Ionosphere Center (temp. f/t))
Laboratory Technician, A-18 (University Health Ser. (perm. p/t))
Laboratory Technician (NS) (Entomology (G) (temp. p/t))
Research Aide (LASSP (temp. f/t))
Research Associate (Agronomy (temp. f/t))
Research Technician II, NP-10 (Biochemistry (perm. 3/4))
Research Spec. (Agricultural Economics (temp. f/t))
Psychiatric Social Worker (Health Services (temp. f/t))
Extension Aide (Div. of Nutritional Sci. (temp. p/t))
Extension Associate (Div. of Nutritional Sci. (temp. f/t))
Department Secretary, A-13 (Office of the Dean of Students)

Tuition Increases 10% for 1975-76

A 10 per cent tuition increase in most endowed divisions of Cornell was approved by the Board of Trustees, meeting in New York City over the weekend.

The increase of \$345 will bring total tuition in 1975-76 up from \$3,430 to \$3,775 for the year in most endowed divisions.

President Dale R. Corson cited the pressures of spiraling inflation coupled with a sagging economy as major factors in the increase. The subject of a projected tuition increase was debated considerably on campus during the last part of the fall semester.

Corson said, "Every one of us regrets the circumstances which have thrust this substantial adjustment upon us. Although I believe that tuitions must continue to rise more or less in pace with inflation, I do not believe such adjustments can be expected to exceed the rate of inflation."

"Increases greater than inflation were effected throughout the period 1969 through 1973. The margin was one of the sources of funds which contributed to Cornell's ability — and to the ability of other comparable institutions — to prosper and grow. In the future, tuition appears an unlikely candidate to play this important role."

After action on the increase, Board of Trustee Chairman Robert W. Purcell issued a statement which he said expressed, in general, the board's view on the increases. Purcell said, "The Cornell University Board of Trustees, in adopting tuition increases for the endowed colleges at Ithaca, the statutory units, the Medical College and the School of Nursing, has taken account of the concerns about those increases expressed by members of the University community."

"It is aware particularly of the impact of increases in tuition on both students and their parents. It further shares community concern over the maintenance of the Cornell student body as one of quality and diversity."

"In coming reluctantly to the conclusion that tuition increases are needed, the Board of Trustees considered, along with the community input which it received and welcomed, trends in family income and financial aid requirements, the need to preserve higher educational quality, and the effect of new tuition levels on Cornell's ability to maintain a diverse student body, particularly in terms of socio-economic diversity."

"The board, unfortunately, had to take into consideration also the ever-increasing inflation and the negative effects economic problems are having on the University's financial situation."

"It also recognized that the University was bearing a heavy share of its financial burden out of its Capital Fund and that not only would its projected 1975-76 deficit be greater if tuition were not increased but it would be much greater without the total use of capital currently projected."

The \$345 increase will apply to the Colleges of Architecture, Art and Planning, Arts and Sciences and Engineering; the Unclassified Division; the School of Hotel Administration and the Graduate School.

In the School of Business and Public Administration, the increase for first-year students in 1975-76 will be \$400, to \$4,100, with the guarantee that



Here We Go Again...Registration

that figure will hold for the second year of the two-year graduate program.

In the Law School, the increase will be \$400 to \$3,700; in the Medical College, \$1,000, from \$3,000 to \$4,000; and in the School of Nursing, \$350, from \$2,050 to \$2,400.

Regarding the \$1,000 increase at the Medical College, the largest in its history, it was pointed out at the meeting that the Medical College has felt the collapse in equity values even more acutely than the en-

dowed colleges at Ithaca, because a high proportion of its investments have been held in the Capital Fund. The college also is heavily dependent on government and foundation funding, which, while expected to continue at roughly their present levels, will show some loss in purchasing power.

In the Statutory Divisions, tuition will increase \$150 per year to \$1,650 for New York State residents and \$350 per year to \$2,450 for non-resident undergraduates in the Colleges

of Agriculture and Life Sciences, Human Ecology and Industrial and Labor Relations. In the Veterinary College, for residents a \$200 increase from \$2,100 to \$2,300, and for non-residents a \$350 increase from \$2,700 to \$3,050.

In the Graduate School both resident and non-resident tuition for the Statutory Colleges (except Veterinary) will go up \$150, both from \$1,700 to \$1,850. For Veterinary, both resident and non-resident tuition will go up \$200, from \$2,100 to \$2,300.

Corson Outlines Cost-Cutting Policies

Continued from Page 1

which the task of cutting back the University's program should be based.

Among them are: 1. The academic program is the "raison d'être" of the University and everything must be judged in the light of its effect on the quality of the student body and the faculty and on the ability to continue a high quality teaching and research operation; 2. efficiency in the administrative and support machinery must be the first point of attack; 3. the University libraries must be a central point of concern; 4. required savings cannot be achieved by uniform, across-the-board cuts; and 5. the steps taken must be large enough to last at least five years so that it will be unnecessary to start a new program-cutting exercise when the current effort is completed.

As to studying the problems and making recommendations about priorities, Corson said he will establish a series of task forces on specific problems, particularly those related to administrative and support areas and to inter-college programs. Also he will initiate a college-by-college study under the supervisions of the respective deans. The task forces, which would be in the two basic areas of administrative and support services and programs and policies bearing directly on the academic program, will be

composed of faculty, students, administrative staff and alumni as appropriate.

Corson said he proposes an overall, small steering group to coordinate the entire effort. This group will be chaired by a faculty member and will include the president, provost, vice president for administration and dean of the faculty as ex officio members. Corson also delineated his view of the role of the new Budget Committee of the Faculty Council of Representatives in the recommendation process.

Corson stressed that he, as University president, in consultation with the provost and with the deans, will make the final decisions and, where appropriate, make recommendations to the Board of Trustees. "In making the final decision," Corson said, "the president as well as the provost and the deans will need all the help and advice they can get, in particular from the faculty, from the University Senate and from the various task forces."

Corson said he is asking for final recommendations from study groups and task forces by July 1 in order to make decisions dictated by the requirement for 1976-77 budget guidelines being ready by Sept. 1.

Corson said he shared the view expressed in the concluding remarks of the report of the Trustee Ad Hoc Committee on

Capital Financing which also was presented to the Board of Trustees at the midwinter meeting. The remarks read: "Cornell is embarking on a new way of life with the need to re-order old, and establish new priorities. A long and difficult road lies ahead. The task is just

beginning. Education is concerned with people and human values. The changes which are ahead arouse both the hopes and fears of each of us. If together we face the future with honesty and courage, Cornell will endure as a distinguished University."

Trustees Name Group On Academic Affairs

The Board of Trustees has established a Trustee Committee on Academic Affairs whose function is to inform the board concerning the University's academic affairs to enable the board to perform its function better.

The committee, which was established at the annual midwinter meeting of the board in New York City, which ended Saturday, will consist of not more than 10 members and will be a special committee of the board. (There are three types of board committees — standing, special and ad hoc — based on their longevity and their charge.)

Elected to serve on the committee were Trustees David J. Culbertson (chairman), Charlotte W. Conable, Robert A. Cowie, Richard I. Fricke, Robert S. Hatfield, Charles W. Lake Jr., Robert L. Sproull, and Judith T. Younger. A faculty

and a student trustee will be proposed for election to the committee at a later date. Board Chairman Robert W. Purcell and University President Dale R. Corson will serve as ex officio members of the committee.

New Laboratory

A new diagnostic laboratory for identification of crop-damaging nematodes has been established at the State College of Agriculture and Life Sciences.

The Nematode Diagnostic Laboratory was set up in the College's Department of Plant Pathology. Prof. William F. Mai, nematologist, is the supervisor, and Mrs. Lynn M. Shreve is in charge of laboratory operations.

Nematodes are minute, soil-dwelling plant pests destructive to a wide range of crops.



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Chronicle Comment

Chronicle Comment is a forum of opinion for the Cornell community. Comment may be addressed to Elizabeth Helmer, managing editor, Chronicle, 110 Day Hall.

Manpower Data Bank Suggested

Editor:

Faced with shrinking resources, a common reaction in organizations is to fire a portion of the work force. In the long run this may prove to be the least desirable solution from both a social and an economic point of view.

Before we reach the stage where sizable layoffs become a possibility at Cornell, would it not be possible to establish a program in the university designed to preserve jobs and yet deal with economic exigencies?

For example, the university might institute a policy whereby it would reduce the work force through natural attrition (retirements, resigna-

tions, and so forth) and place a moratorium on new hires. At the same time, in order to meet the real needs of departments or colleges that have lost personnel, a manpower data bank could be established to relocate employees who had the required skills but who no longer may be needed in their own divisions. If not already available, this skills roster or inventory could be compiled from existing personnel records.

Undoubtedly, there would be problems. There may be many more requests from the data bank than contributions to it and it would take time to set up. Where skills are deficient, it will probably be necessary to

waive the moratorium. It will also take a new sense of interdependence and a willingness to share current resources to make this program work.

Such a policy will not help those in the community who are looking for employment but it would place Cornell among those institutions which are seeking humane solutions to a difficult and vexing problem.

Charlotte Gold



Board Approves New Part-Time Faculty Policy

A policy recognizing the concept of part-time faculty appointments for Cornell University faculty members at both tenure and non-tenure ranks were approved by the Board of Trustees at its regular quarterly meeting held this weekend in New York City. The new policy takes effect with the 1975-76 academic year.

These appointments are designed to provide greater flex-

ibility for University faculty members and the academic departments and colleges. Such appointments are authorized to permit faculty members to maintain continuity of their academic careers when other professional and personal commitments restrict the time they can devote to academic responsibilities. The academic units will gain greater staffing

flexibility. A part-time faculty appointment will consist of not less than one-half the academic responsibilities required of a full-time appointment.

Exempted from the new part-time appointment option are the Medical College, the School of Nursing and the Graduate School of Medical Sciences, all located in New York City.

The trustee action also specified employment benefits and criteria for part-time appointments of qualified men and women to the faculty. The appointments will be made at the discretion of the colleges.

All rights, privileges and benefits, including sabbatical leave, that are available to full-time faculty appointments will be available to part-time facul-

ty on a pro rated basis, except where such pro ration is not feasible.

Part-time faculty must meet performance standards identical to those applied to full-time appointments, including procedures governing initial appointment, promotion and/or tenure appointment. The exception will be in meeting length-of-service requirements. Such requirements will be judged on the basis of equivalency to full-time service. Tenure consideration in both part-time and full-time appointments would come not later than the equivalent of the sixth year of full-time employment.

For new hires to part-time, the appointments will be established in accordance with these procedures. Additionally, current full-time faculty will be eligible for part-time posts just as part-time faculty will be eligible for transfer to full-time status. Status changes may be initiated by faculty members or by their department chairman or dean; such status changes require consent by the faculty member.

Changed status will not cause gain or loss regarding length-of-service requirements, and any changes in rank associated with part-time/full-time transfer will be subject to the appraisal standards and procedures required for appointment to the new rank.

During the past two years, several University groups recommended Cornell adopt part-time faculty appointments: the Provost's Advisory Committee on the Status of Women, the Dean's Council, the Faculty Council of Representatives and the Personnel Planning and Policy Board. The specific regulations adopted by the trustees were prepared in May 1974 by the Committee on the Professional and Economic Status of the Faculty.

Trustees Consider University Finances

Continued from Page 2

vide regulations for these appointments as well as the necessary University Bylaw amendments.

23. The president recommended revision of the Contributory Retirement Income Plan legislation regarding part-time faculty and certain non-exempt part-time employees. The trustees approved the revision.

24. The proceedings of the Joint Administrative Board of the New York Hospital-Cornell Medical Center for Nov. 14, 1974, were presented for information.

25. The trustees established a Trustee Committee on Academic Affairs to be chaired by Trustee David J. Culbertson. The committee's function is to inform the board concerning the University's academic affairs to enable the board to perform its function better.

26. The trustees, upon the president's recommendation, elected individuals to membership on the Council for the New York State College of Human Ecology.

27. The board approved a resolution thanking those trustees whose terms have ended — Desdemona P. Jacobs, Dr. Allan Gibofsky, Jane P. Danowitz and Harold O. Levy — for their participation on the board and their contributions to it, and wishing them well in their future en-

deavors.

28. The trustees heard the annual report of the Investment Committee from the committee chairman, Trustee Nelson Schaenen, Jr. He reported that along with most, if not all, university endowments, Cornell's endowment funds declined in value during 1974 as a result of market reactions to inflationary pressures, interest rates and the political environment. Trustee Schaenen reported several positive accomplishments. Among these were relatively good six-year results achieved in a most difficult period in the performance study of Cornell funds conducted by the New York Stock Exchange firm of A.G. Becker; and a well-maintained income return of the Endowment and Capital Funds. The committee chairman also delineated the two specific recommendations of the Trustee Ad Hoc Committee on Capital Financing which involved the Investment Committee — the recommendation on reduction of the Capital Fund distribution and the recommendation on the establishment of a \$10 million Capital Fund Reserve. He also reported that the Senate-Trustee Investment Advisory Committee "had a successful year in reviewing proxy issues and providing recommendations to the Investment Com-

mittee on the voting of proxies of companies owned in the University portfolio."

29. The trustees heard reports from Trustee Austin H. Kiplinger concerning the Cornell Fund annual giving program, from Trustee Samuel C. Johnson on the Tower Club, from Trustee Robert Cowie on the Charter Society, and from Vice President for Public Affairs Richard M. Ramin on the overall status of gifts to the University to date. Total gifts to the University for the July 1 to Dec. 31, 1974, period were \$11.8 million as compared to \$18.6 million for the same reporting period in 1973. Cornell Fund (alumni annual giving) figures for the first six months of the 1974-75 fiscal year were \$1.3 million and 15,608 donors as compared to \$945,000 and 13,599 donors for the first six months of the 1973-74 fiscal year.

30. The president presented a memorial resolution in memory of Trustee Emeritus Joseph P. Ripley of the Class of 1912 who died Nov. 17, 1974. The trustees approved the resolution.

31. The secretary of the board, Neal R. Stamp, reported on changes in the ex officio membership of the board. He reported that Hugh Carey and Mary Ann Krupsak, with their election as governor and lieutenant governor, respec-

tively, of the State of New York, have taken ex officio seats on the board. He reported also that trustee Morton Adams had been re-elected president of the New York State Agricultural Society and would continue as an ex-officio board member.

32. The Board of Trustees heard reports and recommendations from the Executive Committee for committee meetings held Nov. 12 and Dec. 10, 1974, and Jan. 16, 1975.

Overtime Needs Written Okay

Overtime work by the University's non-exempt personnel, who are paid on an hourly basis, now requires prior written approval by the department head dean or appropriate executive officer, according to Arthur H. Peterson, University treasurer.

This action was prompted by the critical financial problems of the University, he said.

If there is an emergency whereby advance written approval cannot be obtained, written approval should be obtained as promptly as possible.

In either case, a copy of the written approval should be transmitted to the Payroll Office and to the Office of Personnel Services.

Dental Insurance Asked For Cornell Employees

Editor:

I recently communicated with Blue Shield to determine my eligibility for Dental Insurance and was told that I could not take out a policy on my own, but rather that the policies are marketed to groups of 25 or more employees. I was also informed that dental insurance is available to statutory employees at Cornell, because New York State makes a contribution, but that the insurance is not available to employees in the endowed units.

I then contacted Mr. Keller in Personnel Services who told me that the matter is "under study" by Cornell, that naturally Cornell is reluctant to add to its financial commitments at this difficult time, and also that Cornell wants "the best possible plan" before it enters into any program.

However, I would be willing to pay the full premium, if only

Cornell were to enable me to obtain the coverage. This is a "Catch 22" situation. On the one hand Cornell wants to obtain the best possible program, but meanwhile it is making it impossible for people like myself to obtain any coverage, even though we are willing to absorb the entire cost.

Isn't it possible to open up a program to those endowed employees who would be willing to pay Blue Shield's maximum premium for this sort of insurance, with no contribution whatsoever by Cornell? Perhaps at a later date Cornell could pay a portion of the expense, but meanwhile I find it very unfortunate that I am prevented by reason of my employment at Cornell University from buying dental insurance.

Leo Meltzer
Associate Professor
Psychology

40 Years at Cornell

Bethe Teaches Final Class

Hans A. Bethe, Nobel laureate, teacher, political activist and 40-year member of the Cornell community, has taught his last formal class here.

The 68-year-old theoretical physicist will become the John Wendell Anderson Professor of Physics, Emeritus effective July 1, 1975, one day before his 69th birthday. He will spend the current semester and the first months of his retirement on a whirlwind lecture and research tour of major universities and laboratories across the country.

On the side, he will continue to wage "a one-man campaign for increasing our energy sources other than oil and gas" — an activity which he says consumed almost half his time last

semester and which won him front-page coverage in a recent issue of the New York Times.

He believes that long-term solution of the nation's energy problems will require increased use of coal—obtained by strip mining if necessary—as a direct industrial fuel and to create substitute natural gas.

He is also a strong advocate of nuclear fission because he believes it is the only economically feasible, abundant, clean and relatively safe form of energy currently available to the U.S. and the world.

Bethe's stand on the nation's energy crisis caps a lifetime interest in national and international problems. Since his work during World War II on the theory behind the atomic bomb, he has been concerned about the spread of nuclear weapons and has advocated international arms limitation and non-military control of atomic power within this country.

When the nuclear test ban treaty was proposed in the late 1950s, he served as a member of the United States delegation to the Geneva negotiations and wrote and spoke for public acceptance of the plan.

In 1961 he served on President John F. Kennedy's Panel on Nuclear Testing, and in 1968, seeing the danger of a new escalation in the arms race, he warned of the futility of anti-ballistic missile systems.

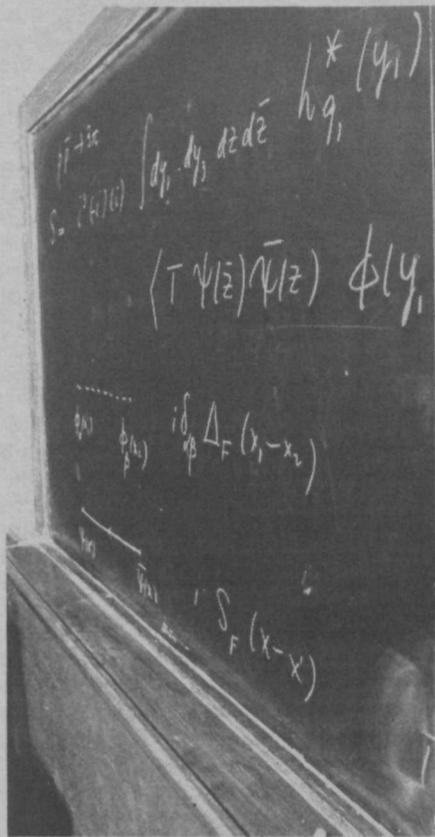
Bethe lamented the fact that the nation no longer has a science advisory committee, such as the one he served on under President Eisenhower.

"There is a great need for a group of scientists to meet frequently and discuss the whole science and technology picture — and suggest policies — rather than having scientists focus on their own narrow research interests," he stressed.

During his long career of wrestling with the fundamental questions of theoretical physics and its application, Bethe has remained an active teacher of



Physics professor Paul L. Hartman and University President Dale R. Corson discuss the future with Hans A. Bethe, Cornell theoretical physicist who won the Nobel Prize for Physics in 1967.



The final equation in Hans Bethe's teaching career at Cornell University has been written. Bethe, however, is embarking on a vigorous semester of research and travel before becoming John Wendell Anderson Professor of Physics Emeritus on July 1, 1975.

scientists as well as of government leaders and the public.

First and foremost, though, Hans Bethe has remained a pure theoretical physics researcher with a particular interest in the theory of atomic nuclei. He helped develop the theory of the deuteron in 1934 and in 1935 he resolved some contradictions in the nuclear mass scale.

His work on nuclear reactions led to the discovery of the reactions which supply energy in the stars. This work, done in the late 1930s, was cited in his Nobel Prize for physics, awarded in 1967.

His current research interests involve theoretical studies of how subatomic particles called pi-mesons interact with atomic nuclei. Once the interactions are understood the pi-mesons can be used as tools to uncover the distribution of neutrons (electrically neutral nuclear particles) within the nucleus.

In mid-January Bethe will begin work at the Los Alamos Scientific Laboratory,

talking with experimentalists about his theory of pi-meson interactions and helping them interpret observations of the sub-atomic particles.

He will spend February teaching at the University of Utah in Salt Lake City. In March he is scheduled to work again on his pi-mesons with experimental physicists at Stanford University's Linear Accelerator Center.

April will be spent traveling through major universities and research centers in the Mid-West. May will bring him back to Cornell for a short visit, but in June he will be off again to pursue his research at Los Alamos. In July he will work on theoretical physics problems at the Aspen Center for Theoretical Physics in Colorado.

Bethe, who has been associated with Cornell since 1935, is a native of Germany. He received his doctorate from the University of Munich and worked with Lord Rutherford at Cambridge University and with Enrico Fermi in Rome.

Natural Gas Cut Off

University Fuel Costs Rise

The University faces an unexpected increase of some \$400,000 in fuel costs because it has been ordered to stop burning natural gas for at least a year starting Feb. 1. The Central Heating Plant will bear most of the cost increase.

The New York State Electric and Gas Co. notified the University last week that because of the natural gas shortage it would cut off service to all Cornell units where an alternative fuel such as oil or coal can be used.

In facilities where an alternate fuel cannot be used, gas will be supplied on an allotment basis and penalties imposed if allotments are exceeded. Most of these facilities are off the main campus.

According to Robert H. Clawson, the University's utility rates engineer, the unexpected development will cost

about \$100,000 above the University's fuel budget for the current fiscal year which ends June 30, and will mean an increase of about \$300,000 in the fuel budget for 1975-76.

Clawson said that although the University expected a significant natural gas curtailment there was no advance warning that it would be a total one. Although the cut-off has been ordered for one year, Clawson said it isn't realistic to believe the University will have access to natural gas in the near future.

This is the second straight year the University's budget has taken a severe and unexpected blow from the energy crisis. Early in the 1973-74 fiscal year the University was suddenly faced with an increase in fuel costs as a result of the Mid-East oil embargo in the summer of 1973.

The embargo and its side effects resulted in the 1973-74 fuel costs hitting \$2.1 million dollars; they had been expected to be no more than \$1.6 million when the budget was prepared.

The 1974-75 fuel budget, which took into consideration extensive conservation measures, was set at \$2.3 million. With the natural gas cut-off actual costs are expected to exceed \$2.6 million. However actual costs depend on the coal/oil burn ratio, availability and cost, Clawson said.



Academic, Financial Dateline

Thursday, Jan. 23 — Registration material will be available from 8 a.m.-4 p.m. and on Friday, Jan. 24, from 8 a.m.-3 p.m. Students in the Colleges of Architecture, Art and Sciences, Agriculture and Life Sciences, School of Business and Public Administration, College of Engineering, Graduate school, School of Hotel Administration, College of Human Ecology and Unclassified will pick up registration material in the Straight Memorial Room. Students in the Law School, School of Industrial and Labor Relations, and College of Veterinary Medicine will pick up registration material at their division offices.

—Registration for new and rejoining students will be in Barton Hall, noon-4 p.m. Students will report at the time indicated on their Registration Permit Card. Following University registration, students will be instructed to report to their division offices to complete their registration.

Friday, Jan. 24 — Continuing students will register between 8 a.m.-noon and 2-4 p.m. Students in the Colleges of Arts and Sciences, Agriculture and Life Sciences, Graduate School, School of Industrial and Labor Relations, School of Hotel Administration and College of Human Ecology will register in Barton Hall. Students in other divisions will register at their division offices. Everyone will register at the time indicated on his Registration Permit Card.

Monday, Jan. 27 — The North-East Transit System (South Lansing) begins full operation.

Reminders: Financial Aid Renewal Applications for the 1975/76 academic year are now available in the Financial Aid Office, 203 Day Hall. The application deadline is March 3, 1975.

Even with Cuts, 1975-76 Budget Shows Deficit

Continued from Page 1

and other funds."

The budget includes \$2.6 million reserved for increases in those salaries and fringe benefits which are financed from general purpose funds. Corson said this figure is tentative and intended for planning purposes. "Although we cannot possibly provide cost-of-living adjustments adequate to offset the effect of inflation, competitive salaries are essential for maintaining a high-quality operation," he said. "However, the funds that can be made available for salaries will necessarily depend on our success at realizing the savings of the cost-reduction program."

The Medical College budget totals \$38.7 million, with a \$474,000 deficit. The chief features in this budget are an

increase in tuition from \$3,000 to \$4,000, a reduction in anticipated investment income of \$259,000 and a 25 per cent increase in the costs of operating the physical plant due to inflation.

Except for recommended tuition levels, no action was taken on the budget for the statutory colleges. The board will act upon the statutory colleges' budget at a later date after review by the State Legislature. However, in his budget presentation, Corson said, "It appears the current economic crisis may have a serious impact on State of New York revenues." One half of the direct support for the statutory units is received from New York State.

The 1975-76 budget calls for an increase of 242 students at Ithaca consistent with levels projected in "Cornell in the

Seventies," which would bring undergraduate and graduate fall enrollment to 16,450. This would increase tuition income by about \$687,000. The 10 per cent tuition increase is expected to net about \$3.2 million in increased income, after financial aid expenditures are deducted. Income from gifts is assumed to increase by \$1.3 million over the amount received for 1973-74. A change in the policy for treatment of bequests recommended by the trustee ad hoc committee on capital financing was approved by the board to help achieve this goal.

The board also voted to distribute from the Capital Fund 7.4 per cent of the average unit value over the five-year period ending June 30, 1975. (This amount, however, represents 10.5 per cent of the unit value

as of Nov. 30, 1974). The distribution formula is expected to require use of capital of \$3.3 million at Ithaca and \$1 million for the medical units at New York. This reduction from the formula 8 per cent payout rate was felt necessary again this year because of the poor performance of the stock market. In addition, funds from the Capital Fund will have to be used to meet the anticipated \$1.5 million general funds deficit at Ithaca and \$498,000 deficit in New York.

In discussing the \$2.3 million dollar reduction in expenses for the endowed colleges at Ithaca, Corson said all units would share in the responsibility for making reductions. "Because it is a quick response to the adverse turn in the national economy the budget does not call for significant changes in programs. Time

simply has not permitted the careful examination of either academic or support programs which would permit actions having major, long-run consequences."

Plans call for staffing levels to be reduced by 5 per cent both in college and support services through controls on hiring and holding vacated positions open whenever possible. There will be an additional \$500,000 to \$600,000 reduction in student, administrative and other support services. Corson said deans, vice presidents and department heads have been asked to accomplish these necessary measures "without destroying their programs in the process."

"This reflects a substantially deeper cut than was taken during any of the three preceding years," Corson said. "As in the earlier cost reduction program we seek to emphasize curtailment in support services in order that there will be minimum disruption in essential academic programs. Every expenditure must and will be tested as to whether it contributes to Cornell as a place of excellence for students to learn and faculty to teach and to extend the frontiers of knowledge through research," he said.

The guidelines used in preparing the budget assume a 5 per cent adjustment for inflation in general expense budgets, with a 10 per cent increase in book-purchase funds and other categories particularly hard-hit by inflation. Energy costs are budgeted at 33 per cent higher than the current estimate for 1974-75, and, despite major savings from conservation, at least double the costs for 1972-73.

Funds for new programs will be made available mainly through substitution and reallocation of priorities, Corson said. Wherever possible, restricted funds will be used in relief of the general operating budget.

Budget estimates assume continued economic stagnation, but with some tapering off of the present rate of inflation, and possible modest recovery in stock market prices. Also, planned increases in government student aid programs are assumed. Changes in any of these assumptions could affect next year's budget and amendments to it might be necessary during the course of the year, Corson said.

"Through this budget," Corson told the trustees, "each of the University's many constituencies is being asked to assist in meeting Cornell's financial problems. Our alumni will be asked for larger gifts, our students to pay higher tuitions, the faculty and staff to accept pay adjustments which reflect loss in real income, and our trustees to authorize further invasion into a capital reserve which already is dangerously low. I am not happy to make these requests. Knowing that they are necessary, however, I feel confident that I can expect the cooperation of all concerned as Cornell works to regain a sound financial position."

Weiss Report Deals with Finances

Continued from Page 1

1975 begins is not whether it can remain in the 'steady state,' but to what degree it will undergo 'shrinkage'."

The committee report is expected to help the administration to make a planned response to its financial problems. "The committee has delineated the parameters of the problem and provided an analysis and a focus from which the president and the administration in concert with the faculty and the entire Cornell community can proceed to establish the necessary priorities and take the necessary actions," the report states.

The Board of Trustees approved the report and directed the president to implement the report, making specific recommendations to the Executive Committee where appropriate. The board also requested that

the president report back to the full board annually regarding progress in meeting the recommendations. The board also discharged the committee with thanks and appreciation.

It says the University cannot continue long as a university of distinction "without a sound financial base on which to support its teacher-scholars and the essential facilities which enable them to conduct their teaching and research."

The report says, "The true measure of the greatness of a university is not its wealth or financial soundness; instead the measure of its greatness is the quality of its faculty and student body, the range and vitality of its teaching, and the inventiveness with which it widens intellectual and cultural horizons and contributes to the expansion of knowledge."

The committee report says it "has made an effort to ex-

amine Cornell's financial condition from a perspective that recognizes all of its resources, qualitative as well as quantitative, future as well as present, and to offer recommendations that it believes will most effectively sustain Cornell's strengths in light of difficult economic challenges.

"The committee in this report directs the University toward austerity, the report says. "The current economic situation is forcing a re-examination of every area of University life. But this re-examination has long-term advantages which should stand the University in good stead in years to come. In the future Cornell may be doing fewer things, but that in no way should reduce its commitment to excellence."

The committee report says its recommendations are offered in a spirit that recognizes "opportunities as well as burdens in the necessity to be more austere" and concludes that "if the University community is sufficiently united, wise, and steady in its deliberations and decisions, it has an opportunity not only to preserve, but to strengthen Cornell." Some of the observations and recommendations made by the committee follow:

—A long-term equilibrium must be reached between income and expense. In order to do this, "the University faces a need to make adjustments in general purpose operations on the order of \$7-10 million over a three-year period, so that it may reach a state of equilibrium between income and expense by 1978."

The report notes that sufficient time should be taken for development of this plan to make sure that faculty, students and other members of the community have an opportunity to be heard.

The income/expense adjustment of \$7-10 million in the endowed units at Ithaca represents 10 to 15 per cent of the current general purpose budgets for those units. The committee arrived

at these figures, which it said could change based on changing conditions, after studying computer modeling results which took situations ranging from very optimistic through very pessimistic.

—The University recently has undertaken approximately \$26 million in debt in State Dormitory Authority bonds, largely for projects already completed or under way, and notes that this debt was committed "prior to the existence of the committee." About \$18 million of that replaces existing debt, and \$8 million is new debt. The committee says it has determined that with this increased debt the University is presently carrying all the debt it can prudently afford under present conditions.

The report recommends that any debt established for either new construction or maintenance, be done only under "the stringent criteria set up by the committee." These criteria include such things as maintenance of a debt service reserve throughout the life of the project, review of projects on a case-by-case basis, and a statement of the impact of the debt on future budgets to incorporate the expense of additional debt service.

—The possibility of a "liquidity squeeze" — an inability to meet current obligations out of free, unrestricted funds, or put more simply to provide cash to pay for operating expenses — is a problem the committee designated as "severe." It found that Cornell's immediately available unrestricted and unencumbered funds have fallen to a level of \$20 million for the endowed colleges at Ithaca. It also said there is a "likelihood of still further reductions as the Capital Fund is used to meet budgetary needs over this year and next."

The committee, expressing concern about this low level of unrestricted funds, said it is "a matter of first priority to undertake to bolster them." It recom-

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Weiss Statement

Here is a statement by Trustee Stephen H. Weiss, made concurrent with release of the report of the Cornell University Trustee Ad Hoc Committee on Capital Financing.

* * *

Cornell, like all of private higher education, is involved in an intense battle to maintain its financial strength and integrity in this time of severe national and international economic stress. After seven months of deliberation, the committee has delineated the parameters of Cornell's particular problems and has made specific recommendations aimed at assuring that Cornell will continue as a distinguished institution of higher learning.

Cornell's problems, like those of other private colleges and universities, are real and complex. They must be faced candidly. The Cornell response must be firm and unified. Cornell must also join with other institutions in presenting the case for higher education at all levels of government because without more governmental support all high quality private higher education is eventually endangered.

While we must not delude ourselves about the seriousness of the present situation, neither must we underestimate our strengths, for Cornell remains one of the strongest educational institutions in the world. We must not forget that a university cannot be measured simply in terms of dollars and cents because its main assets are its faculty, its alumni, its student body and its staff. Cornell is fortunate in not only being well endowed with all these assets but in also having the added strength derived from its dual capacity as a public as well as a private institution and its unique status as the land grant university of the State of New York.

Cornell will not shrink from making the difficult choices and decisions which are ahead so that it can endure as a distinguished university.

Background, Focus

Weiss: Summary Section

This report strives to provide a background and a focus which will enable the Board of Trustees and the entire Cornell community to better understand the complex financial position of the University in this period of almost unprecedented financial stress. In the following pages the Committee offers its view of the total financial picture and makes specific recommendations in the areas of its greatest concern.

The committee has attempted to be straightforward and candid in its analysis. It does not claim to offer a panacea or magical solutions. The financial problems which Cornell is facing are real. They are serious. They must be of concern to all who care for Cornell. And, unfortunately, Cornell's financial problems do not seem temporary in nature nor, in many cases, internally controllable.

In offering its evaluation of

the total Cornell financial situation, the committee believes that, more important than any single recommendation, is the general need to realize that these are not ordinary times, neither for society at large nor for higher education in particular, and that difficult and oft-times painful decisions will have to be made to enable Cornell to regain its financial security.

Cornell, like all of American society, has entered an era of shrinking expectations. In 1974, with a suddenness that took almost everyone by surprise, the University was hit both with double-digit inflation that sent costs of energy and materials soaring and with a sharp decline in the value of its invested assets.

As the committee began its work, problems relating to a shift to "steady state" after years of growth were compounded by other pressures upon higher education; for example, a lessening of the

public's confidence in its institutions of higher education, declining enrollments, a diversion of federal monies from universities, the prospect of diminishing foundation support, increased competition for students from public universities, and a gloomy outlook for continued high levels of private support.

The question which Cornell faces as the year 1975 begins is not whether it can remain in the "steady state", but to what degree it will undergo "shrinkage."

In recent months we have experienced interest and inflation rates unprecedented in the modern economic history of this nation, in combination with the worst recession we have suffered since the end of World War II. For the United States, the era of cheap food, fuel and money has come to an end. The cost of one item, oil, which has increased four-fold, has led to major international

Continued on Page 8

Report Discusses Finances

Continued from Page 6

mends that budget planning be geared to maintaining "at least \$15 million of legally unencumbered funds, and that a \$10 million Capital Reserve Fund be established which would not be invaded without specific approval of the board." The report asks that the Investment Committee of the board identify funds which might be transferred "from existing investment pools" to set up this reserve and to develop an investment policy for the new fund.

The committee examined the concept of "total return" and the way it has been used in management of the Capital Fund to take advantage of the growth of stocks that appreciated in value, in addition to paying dividends. In 1972, trustees adopted a formula for determining the amount of money which might be taken from the fund each year, whether or not gains were actually realized. The "formula distribution" has allowed approximately eight per cent of the average unit value over the preceding five years to be distributed annually.

The committee said that although the "total return" policy served the University well during years of stock market growth, it has come under criticism because of the market setbacks of the past year.

The committee recommends that the formula distribution from the Capital Fund be reduced from 8 per cent of market values over the prior five years to from 5 to 6 per cent of this "base value." It suggests that it be accomplished gradually, by drops of 1/2 to 1 per cent annually, so that the level of funds available for current use does not drop excessively in any one year.

The committee recommends

Copies of the complete Weiss Committee report will be available next week in departmental offices and at all the major University libraries.

that "unrestricted bequests be pooled, and that, as a temporary policy, up to \$750,000 per year be used in relief of budget with the balance being transferred to the Capital Fund."

This measure is one that would be subject to review by the board annually. By putting a ceiling on the amount credited to current income from this source, the committee's intent is to avoid year-to-year variations. It estimates that this will normally increase current income by about \$500,000 a year.

The committee noted in its report that it was charged *not* to choose among vying priorities available to the board and administration in enhancing income and reducing expense to achieve equilibrium. However, it said it has examined many options "which it believes worthy of further investigation and discussion by the administration."

It suggests exploration of such things as consortia with other colleges and universities; avoidance of internal duplications, especially between the endowed and statutory colleges; fuller utilization of plant, and better use of automation and data-processing equipment.

The report notes that tuition is the "major source of unrestricted income and must bear an appropriate share of the burden of increased costs." It says, however, that "quite clearly tuition cannot continue to increase at a rate of 10 per cent or more without seriously affecting the character of the

student body and ultimately the very nature of the University as we have known it."

It says that, in addition to tuition, "other means of increasing income, such as fuller use of facilities, more realistic cost recovery on sponsored projects, and greater alumni and public support should be explored."

The Weiss Committee says that because the University has been operating under stringent budgets since 1971, it may be reaching the limit of savings which can be achieved by across-the-board cuts without impairing effectiveness.

"In order to achieve long-term equilibrium" it says, "there must be planned reductions in nonacademic and academic programs. This task is the responsibility of the president, and it is bound to be a difficult one. It will require a planning procedure based on both qualitative judgments and costs. Explicit priorities will need to be adopted and, as a result, major changes in policy and approach made. Conceivably the University may become a different institution than it is today, but throughout the process Cornell must strive to retain its unique personality, its essentially private character, and its academic excellence."

Other members of the committee are: Morton Adams, Richard I. Fricke, David J. Culbertson, Jansen Noyes, Jr., Robert G. Engel, Nelson Schaenen, Jr., Earl R. Flansburgh, Harold D. Uris and Bruce Widger.

Report's Preface

Cornell University's primary mission is to educate, to discover, and to render public service. The sole purpose of this report, therefore, is to help assure the integrity of Cornell in order to enable it to continue its educational mission with distinction.

Immersed in a great mass of financial facts and figures, it is easy to lose true perspective on the nature and function of a university. This report is written in steady recognition that university finances are a means not an end. The true measure of the greatness of a university is not its wealth or financial soundness; instead the measure of its greatness is the quality of its faculty and student body, the range and vitality of its teaching, and the inventiveness with which it widens intellectual and cultural horizons and contributes to the expansion of knowledge.

The financial well-being of Cornell cannot ensure its greatness. On the other hand, Cornell cannot long continue as a university of distinction without a sound financial base on which to support its teacher-scholars and the essential facilities which enable

them to conduct their teaching and research.

It is not this committee's function to establish academic priorities. That function belongs to the president, who is the University's chief executive and educational officer, and the provost, in close and constant collaboration with the deans and the faculty.

The committee has delineated the parameters of the problem and provided an analysis and a focus from which the president and the administration in concert with the faculty and the entire Cornell community can proceed to establish the necessary priorities and take the necessary actions.

The challenge to the Cornell educational community is to attain a unanimity of resolve; to work together in order to establish priorities with an eye always to the general good rather than the limited interest.

The committee has the faith that Cornell will have the honesty, the will, and the spirit of cooperation to meet the present challenge and to emerge, as it has from adversity in the past, as a healthier and stronger institution.

Recommendations

A. Equilibrium

The University administration should prepare a plan for making adjustments in general purpose operations on the order of \$7-10 million over a 3-year period so that it may reach a state of equilibrium by 1978. The budget for 1975-76 should be a first step toward this objective.

B. Liquidity

The University's financial planning should be geared to maintaining at least \$15 million of legally unencumbered capital. Ten million dollars at current market of this amount should be sequestered in a Capital Reserve Fund. This Reserve should be invaded only with the specific approval of the Board of Trustees. The Committee recommends that up to four million dollars in the \$10 million of the Capital Reserve might be pledged, however, to fulfill State Dormitory Authority and other legal requirements.

The Investment Committee should frame an investment policy appropriate to a Capital Reserve Fund and identify funds which might be transferred from one of the existing investment pools to establish this reserve.

The University administration should identify ways in which the University's liquidity position may be improved. Areas for investigation should include efforts to release the University from outdated endowment restrictions, and to utilize available endowment fund balances when legally appropriate.

Cornell should not pledge

securities unless required by law or in other special circumstances specifically approved by the Investment and Executive Committees of the Board.

C. Contingency Planning

The administration should implement an explicit contingency planning process, backed by sufficient resources to make this process effective.

D. Objectives for Invested Funds

A principal objective of the University's financial policies should be sufficient growth in invested funds that the revenues appropriately derived from these funds will at least (a) keep pace with inflation and the increased cost of education as reflected in operating budgets for the endowed colleges and (b) meet a growing proportion of statutory college costs.

The formula distribution from the Capital Fund should be reduced from eight per cent of market values over the prior five years to a level of five to six per cent of this "base value." This should be done gradually, by one-half to one per cent annually, so that the level of funds available for current use does not drop excessively in any given year.

E. Debt

The Committee believes that under present circumstances it is imprudent to assume additional debt. Any consideration of further debt should be only for absolutely essential projects for which no other sources of funds can be identified.

When debt is considered as a

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President Details Budget Process

MEMORANDUM

TO: Members of the Executive Committee

FROM: Dale R. Corson

SUBJECT: Budget for 1975-76

I am pleased to transmit the University's endowed college budgets for the fiscal year 1975-76 for your consideration and for recommendation to the full board.

Financial planning at this time is a particularly difficult task. The curtailments which have been thrust on us by the events of the past year are complicated by the uncertainty about what lies ahead. Over the past several months we have sought to achieve a better understanding of our new financial environment and what it may imply for Cornell, involving with us in this task as broad a range of faculty, students, and administrators as time has permitted.

Our budget planning as a result has focused on basic strategies including necessary tuition increases, enrollments, financial aid allocations, and cost reductions. Allocations also have been established for each of the colleges, the Library, and most other elements of the academic program. Detailed budgets for support and plant services have not been completed but are being developed within the overall allotments reflected in this document and will be brought before the board in March.

The reasons for our financial difficulties have been well publicized and are not unique to Cornell. Inflation is the central problem and has had a major impact on our costs — probably substantially the excess of the \$4.3 million shown here for the endowed college general fund accounts alone. The collapse in stock market prices has been the second major factor, both as it has affected gifts and as it has forced re-evaluation of the University's practice of depending in our annual budgets on use of capital gains. Unfortunately

More Intense Lighting For Campus Approved

The University's Board of Trustees has approved a measure which will increase security lighting in some critical areas of the campus while reducing energy consumption and maintenance costs significantly.

Some 200 outdoor incandescent light fixtures on the endowed college campus will be replaced by mercury vapor lamps at a cost of \$35,000, according to Noel Desch, director of the University's Buildings and Properties Division.

Desch predicted that the changeover would lower University energy costs by \$11,000 per year and would lower maintenance costs by at least \$5,000 per year. Mercury lamps are more efficient and long-lived than incandescent fixtures.

our difficulties do not stop there, since we continue to face needs for increased expenditure to meet social and environmental legislation, to house expanding library collections, to meet plant maintenance and debt service costs, and to assume costs of programs which heretofore have been financed from foundation and other funds.

Other than the curtailment experienced two to three years ago in graduate student support, the University has not yet suffered major withdrawal of either government or foundation funds, although neither funding source has kept pace with inflation. Similarly, we continue to enjoy applications for more students than we can accommodate. However, should the country enter a depression, Cornell could not escape the impact of the general national distress. Our reserves are not sufficient to permit us to ignore such a contingency. Thus, if a major funding cutback or enrollment fall-off should develop, the budget now being presented for your approval would have to be amended.

The assumptions underlying
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More Report's Summary

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trade imbalances and sharply declining equity prices, and has forced the oil-consuming world to attempt to adjust to a different standard of living. The level of inflation has had a telling effect on the macrocosm of society, but it has had even greater impact on the microcosm of higher education. Inflation takes a heavy toll on society, a heavier toll on higher education, but its heaviest toll on private higher education, which has only limited means for increasing income and is cruelly crippled by spiralling costs.

The committee deliberated,

The over-all levels of lighting on the Cornell campus will also increase because mercury vapor lamps provide more and better light distribution than incandescent bulbs.

The decision to re-vamp lighting in certain areas of the campus was made after the firm of Johnson, Johnson and Roy developed a master plan to upgrade lighting, signage and street furniture on the Cornell campus.

While implementation of the complete master plan is viewed as too costly at present, Desch said, the change to mercury vapor lamps will relieve lighting problems in some of the 20 critical areas cited in the study. The cost will be only about one twentieth of the proposed total system cost.

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vehicle for undertaking a revenue-generating or cost reduction project or in anticipation of a gift, the Trustees must be satisfied that such action is a prudent risk and the following additional criteria are met:

—revenue-generating or cost-reduction projects. Such projects should generate sufficient cash flow to cover all expenses, including costs of operation, and to maintain a debt service reserve throughout the life of the project of at least 10 per cent of the outstanding debt. The anticipated cash flow should be measured in constant dollars, net of any inflationary effect on revenues.

—in anticipation of a bequest or gift. Such projects should be reviewed on a case-by-case basis, and be subject to a specific Executive Committee finding that the proposed project is in the long-run interests of the University and that the gift arrangements create a legally binding obligation upon the donor and his estate.

Any proposal for additional debt should be accompanied by a statement indicating what adjustments are to be made in future budgets to incorporate the expense of the anticipated

debt-service, and how the additional debt may affect the University's capability to assume future debt on reasonable terms.

F. Gift Policies

Every possible opportunity must be taken to use designated gifts in relief of budgets and a high priority must be placed on obtaining such gifts.

* * *

The Committee recommends that henceforth all unrestricted bequests be placed in a pool. From the pool, up to \$750,000 in any one year should be used as current income. Any balance above this figure should be then transferred to the Capital Fund. Appropriate actions to memorialize such bequests should be taken by the administration without regard to the actual disposition of specific funds. This policy should be reviewed annually.

* * *

The University should move ahead as rapidly as possible with the Expanded Gifts Program, presented to the Board in October, 1974, with special emphasis on obtaining endowment funds in relief of operating budgets.

* * *

Gifts for additions to the physical plant should be accepted by the University only if

arrangements for future maintenance of the additional space can be developed and those arrangements are satisfactory to the Buildings and Properties and Executive Committees of the Board of Trustees. The University's objective should be to encourage building donors to provide an endowment to cover its maintenance in perpetuity, as is the case with several buildings recently constructed.

G. Impact of External Funding

The administration should study ways in which fuller recovery of research-related costs may be obtained within the framework of present legislative requirements and funding practices and should seek the cooperation of other similarly situated institutions in persuading sponsors to more fully cover research costs. Major new research programs should be undertaken only after a thorough review to identify additional costs and the priority to be placed upon the program relative to other needs.

H. Academic Facilities and Plant

The administration should, in establishing allocations in annual budgets

—recognize the long-range importance of academic facilities and equipment as well as physical plant

—provide for proper maintenance of these facilities

—avoid the false economies likely to accompany expense reduction in these areas or failure to correct critical maintenance problems.

* * *

The administration should assess priorities for a "catch up" maintenance program and plan in detail the execution of this program. Maintenance, together with necessary investments for energy conservation and pollution control, must become a principal focus for the Planning Office and the Buildings and Properties design staff, supplemented as necessary by additional staff and by expert consultants.

current economic situation is forcing a re-examination of every area of University life. But this re-examination has long-term advantages which should stand the University in good stead in years to come. There are opportunities as well as burdens in the necessity to be more austere; as one scholar/administrator has observed, "The greatest opportunities for improvement in higher education occur when there is either new money or no money." In the future Cornell may be doing fewer things, but that in no way should reduce its commitment to excellence.

It is the committee's judgment that if the University community is sufficiently united, wise, and steady in its deliberations and decisions, it has an opportunity not only to preserve, but to strengthen Cornell.

drew its conclusions, and formulated its recommendations in the knowledge that Cornell is not alone in its economic difficulties. However, there is little solace to be gained from the camaraderie of the afflicted. There should, however, be solace for the Cornell community in knowing that the committee, after reviewing the financial contingency programs and actions of other colleges and universities, has concluded that Cornell is doing as much and perhaps more than others to define and meet its financial problems.

The overriding concern of the committee is that the precious aspects of Cornell be viewed in concert with one another and that an appropriate balance be maintained among them. The committee has made an effort to examine Cornell's financial condition from a perspective that recognizes all of its resources, qualitative as well as quantitative, future as well as present, and to offer recommendations that it believes will most effectively sustain Cornell's strengths in light of difficult economic challenges.

The committee report makes a number of recommendations which should help the University buy time so that it can better withstand immediate economic stresses and consider how longer range solutions may be achieved. However, it has become increasingly obvious to committee members that without a stronger commitment of public support there is little possibility of maintaining the present level of excellence in colleges and universities such as

Cornell. In fact, in the long term, one must seriously question the ability of private quality education in this nation to survive without an increase in government support.

The committee suggests that Cornell and other institutions join together in presenting the case for higher education at all levels of government. In particular, private institutions must band together to stress the importance of maintaining a high quality educational system in this nation. This diversity of both private and public education has been an important part of our nation's heritage and must be preserved for future generations of students.

The committee has done its best to present the problems as it has seen them and to make specific recommendations as to their solution. The committee's recommendations are such as to require important changes in the financial policies of Cornell. It is the task of the entire Cornell community to face these facts and to respond to them with resolve. The response must be unified, because if unity gives way to divisiveness, the cost to the University will be great. These are times which will test us all. If Cornell is to survive the test, we must work together. Also, the Cornell response must come swiftly. If institutions of higher learning are slow to respond to the emergency, their very survival will be in danger.

The committee in this report directs the University toward austerity — an austerity which the committee deems imperative under present economic circumstances. The

1975-76 Presentation

President's Budget Message

Continued from Page 8

the budget estimates are (1) a continuation in the present "stagflation," although with some slackening in the rate of inflation; (2) a \$500 thousand increase in unrestricted gifts plus an additional \$500 thousand increase in current income derived from unrestricted bequests through a revision of present policies for disposition of these funds; (3) an expectation that government and foundation funding will continue more or less to keep pace with program costs; (4) expansion of both state and federal grants for undergraduate student aid; and (5) a modest increase in enrollments, within the goals projected in "Cornell in the Seventies."

Even given these modestly optimistic assumptions, increases in tuition rates of substantially larger dimensions than I like to see are required in both Ithaca and New York in order to meet minimum expenditure needs. Both the Medical and Endowed College budgets also plan modest use of capital (over and above the capital usage resulting from the "formula distribution" from the capital fund) in order to cover expense.

Through this budget, each of the University's many constituencies is being asked to assist in meeting Cornell's financial problems. Our alumni will be asked for larger gifts, our students to pay higher tuitions, the faculty and staff to accept pay adjustments which reflect loss in real income, and our trustees to authorize further invasion into a capital reserve which already is dangerously low. I am not happy to make these requests. Knowing that they are necessary, however, I feel confident that I can expect the cooperation of all concerned as Cornell works to regain a sound financial position.

Endowed Colleges of Ithaca

The proposed budgets for 1975-76 reflect a first "quick response" to the adverse turn in the national economy which developed over this past year. The rapid inflation in utilities cost, shortfall in 1973-74 gifts, the collapse in the stock market, and general apprehension regarding the future of the economy have all contributed to the conviction that the University must move as quickly as possible, consistent with protecting long term values, to curtail expense and to bolster general purpose revenues wherever possible.

Because it is a quick response - planning has been geared to "steady speed" rather than to any significant reduction in program scope - time simply has not permitted the careful examination of either academic or support programs which would permit action having major, long run consequences.

The need to preserve Cornell's long range strength is a thread which has run through all budget discussions. The basic goals continue to be those set forth in Cornell in the

Seventies and endorsed as a basis for future planning by the University Trustees. These included:

- ..Maintaining Cornell as a major research university
- ..Maintaining the excellence of the Cornell faculty
- ..Maintaining student excellence and diversity through improved selection processes
- ..Regaining a sense of community for the University
- ..Achieving change within the University through substitution rather than through growth
- ..Developing a broader concept of Cornell's land grant mission
- ..Improving Cornell's relationships with the state
- ..Strengthening Cornell as "one University" of many faces and programs

The academic program is of course central. Every expenditure must and will be tested as to whether it contributes to Cornell as a place of excellence for students to learn and faculty to teach and to extend the frontiers of knowledge through research.

The University administration recognizes that a substantial reduction in the scope of Cornell's commitments is likely to be necessary in order to adjust to the outlook for higher education during the years ahead. Actions are being set in motion to achieve these reductions which presently appear to be in the order of \$5-8 million over and above those which are proposed in our operating plan for the coming year. This reflects the need to overcome a planned deficit in 1975-76 (\$1.5 million), to diminish the formula distribution from the capital fund (\$1-2 million), to reserve additional funds for long term maintenance and rehabilitation of plant, to assure competitive salaries, to fund past service pension costs, and to respond to continued inflationary pressures and likely diminution of foundation support.

The exact scope of these and other problems cannot be precisely determined. Nevertheless, significant adjustments in Cornell's programs will be required and action to plan these adjustments must be initiated promptly. At our meeting, I will present to you the plan of action I propose.

Reductions in base program of \$2.3 million are planned in 1975-76 as the first step toward regaining budgetary equilibrium. This reflects a substantially deeper cut than was taken during any of the three preceding years. As in the earlier program, we seek to emphasize curtailment in support services in order that there will be minimum disruption in essential academic programs.

The guideline has been to reduce the base level of general fund support to the colleges and library by 5 per cent and to reduce all other controllable costs borne by general purpose funds (chiefly administrative, plant, and student services and other academic support) by approximately 8.5 per cent. It is important to note that these are adjustments in support

levels before taking into account inflationary effects, a \$2.6 million recommended salary pool, increased debt service, and various other "built-in" adjustments. Including these factors, the total expenses of almost every major division will rise despite the base budget reductions; hence the need to request a 10 per cent tuition increase.

The expense cuts being recommended here will be painful and some may prove to have cut too deep. If so, we will seek to correct the error. Also our study of the longer range priorities will be well advanced by the time the 1975-76 budget takes effect. The findings from these studies will be applied immediately if the need for action is clear and the consequences substantial.

Statutory Colleges

Except for recommended tuition levels, the budgets of the statutory colleges are not presented at this time. Yet there is every indication that actions substantially analogous in purpose and scale will be required in the statutory units as in the endowed. Our priorities studies will accordingly embrace these units, and I expect measures to achieve greater economy and operational effectiveness will be applied to both sectors.

The tuitions for in-state statutory college students are now just short of 45 per cent of the endowed tuition and in 1975-76 will also be increased by 10 per cent. Tuitions for out-of-state students will be increased more sharply in order to lift these charges to approximately two-thirds the endowed rate.

Through this budget statutory student tuitions also will make an increased contribution toward costs heretofore borne through general purpose funds. Cornell is barred by statute from assessing charges to the statutory colleges which exceed the costs assumed on their behalf but properly can and should assign to these colleges costs which are incurred directly on their behalf. The changes are being made with the concurrence of the statutory college deans.

Medical College

The Medical College has felt the collapse in equity values even more acutely than the endowed colleges at Ithaca, because of the high proportion of its investments which have been held in the Capital Fund. This college also is heavily dependent on government and foundation funding. We expect this funding to continue at roughly present levels though with some modest loss of purchasing power. As at Ithaca, loss of this support would require amendment of the proposed budgets.

As at Ithaca, a cost reduction program has been introduced at the Medical College. This involves severe curtailment of new programs, reduction of both academic and support staff, and limitation of invest-

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Tuition Schedule

Comparative Schedules of Tuition

Endowed Divisions	1974-75	1975-76	Increase
Architecture	3,430	3,775	345
Arts & Sciences	3,430	3,775	345
Engineering	3,430	3,775	345
Unclassified	3,430	3,775	345
Hotel Administration	3,430	3,775	345
Business & Public Administration:			
2nd Year Student	3,400	3,700	
1st Year Student	3,700	4,100	400
Law School	3,300	3,700	400
Graduate School	3,430	3,775	345
Medical College	3,000	4,000	1,000
School of Nursing	2,050	2,400	350
Statutory Divisions			
Agriculture & Life Sciences - Resident	1,500	1,650	150
Non-resident	2,100	2,450	350
Human Ecology - Resident	1,500	1,650	150
Non-resident	2,100	2,450	350
Industrial & Labor Relations - Resident	1,500	1,650	150
Non-resident	2,100	2,450	350
Veterinary - Resident	2,100	2,300	200
Non-resident	2,700	3,050	350
Graduate School (except Veterinary) - Resident	1,700	1,850	150
Non-resident	1,700	1,850	150
Graduate School - Veterinary - Resident	2,100	2,300	200
Non-resident	2,100	2,300	200

Operations Funds

TABLE V
CORNELL UNIVERSITY - ENDOWED COLLEGES AT ITHACA
ESTIMATED FUNDS APPLIED TO OPERATIONS (IN 000's)
1975 - 76

	UNRESTRICTED			
	GENERAL PURPOSE	DESIGNATED	RESTRICTED	TOTAL
I. Education & General Instruction & Departmental Research	27,685	3,207	4,700	35,592
Universities Libraries	4,704	220	340	5,264
Organized Research	1,277		19,000	20,277
Other Sponsored Programs			3,700	3,700
Organized Educ. Activities		393	76	469
Extension & Public Service	32	680	80	792
Physical Plant Operations	8,473	350	400	9,223
General Administration	3,468		2	3,470
General Expense			70	2,970
Student Services	2,900		150	6,572
General Institutional Exp.	6,262	160		88,329
TOTAL EDUCATION & GENERAL	54,801	5,010	28,518	88,329
II. Related Activities-Operations	3,175	20,318		23,493
III. Student Aid	9,700		5,200	14,900
IV. Debt Service	1,193			1,193
Loan Fund	45			45
V. Undistributed				2,650
Salary & Fringe Benefits	2,650			951
Other Contingencies	951			131,561
TOTAL AUTHORIZED PROGRAM	72,515	25,328	33,718	131,561
Estimated Program Savings & Recoveries	(3,750)			(3,750)
ESTIMATED TOTAL FUNDS APPLIED	68,765	25,328	33,718	127,811

Planning Totals

OVERALL TOTALS (IN 000's)
1975-76 PLANNING FIGURES

	ENDOWED COLLEGES ITHACA*	STATUTORY UNITS*	MEDICAL COLLEGE	SCHOOL OF NURSING	TOTAL	% OF TOTAL
FUNDS PROVIDED FOR OPERATIONS:						
Students (tuition)	47,865	3,173	2,213	482	53,733	22.4
Investments	9,944	418	1,932	10	12,304	5.1
Gifts	7,131	2,406	4,934		14,471	6.0
Public Funds	34,339	60,714	13,471	100	108,624	45.2
Other Sources	3,507	7,725	14,678	374	26,284	11.0
Related Activities	20,372				20,372	8.5
TOTAL INCOME	123,158	74,436	37,228	966	235,788	98.2
Capital Fund Distribution in excess of Income	3,300		1,020		4,320	1.8
TOTAL FUNDS PROVIDED	126,458	74,436	38,248	966	240,108	100.0
FUNDS APPLIED TO OPERATIONS:						
General Purpose	68,765	57,191	11,796	966	138,718	57.3
Designated	25,328	8,145	9,517		42,990	17.8
Restricted	33,718	9,100	17,409		60,227	24.9
TOTAL	127,811	74,436	38,722	966	241,935	100.0

* Includes an estimated 2,700 of internal changes for purchase of accessory instruction income, which have not been eliminated in the totals.



Summer

THREE WEEK SESSION June 4-June 24

ANTHROPOLOGY

- 101 Nature, Culture and Human History: An Introduction to Anthropology (U,G). 4 hrs. cr. M T W Th F 9:30-12. D.J. Greenwood.
304 Biological Anthropology (U,G). 4 hrs. cr. M T W Th F 9:30-12. K.A.R. Kennedy.
305 Psychological Anthropology (U,G). 4 hrs. cr. M T W Th F 8:10-30. T.A. Gregor.
368 Archaeological Research Methods (U,G). 4 hrs. cr. M T W Th F 9:30-12. P.A. Urban-Fisher.

ARCHITECTURE

- 250 (Also Art 161). Beginning Photography (U,G). 3 hrs. cr. Section 1, M T W Th F 9-12, plus darkroom work (two hours a day, average). S. Bowman. Section 2, M T W Th F 1-4, plus darkroom work (two hours a day, average). T. Burton.

ART

- 141 Sculpture (U,G). 2 hrs. cr. M T W Th F 8:30-10:30, or M T W Th F 11-1. J. Squier.
153 Life Drawing and Composition (U,G). 2 hrs. cr. M T W Th F 9-11. A. Singer.
161 (Also Arch. 250). Beginning Photography (U,G).

BIOLOGICAL SCIENCES

- 402 Biological Literature (U,G). 3 hrs. cr. M T W Th F 8:30-11. J.W. Howell.
421 Comparative Vertebrate Ethology (U,G). 3 hrs. cr. M T W Th F 9-11, plus field trips. W.C. Dilger.

CHEMISTRY

- 208 General Chemistry (U). 4 hrs. cr. Lectures, M T W Th F 8-9:50. Recitations, T W Th 2-3. Laboratories, M T W Th F 10-1. S.T. Marcus.

COMPARATIVE LITERATURE

- 343 Medieval Studies (U,G). 4 hrs. cr. M T W Th F 9:10-15, 11-12:15. T.D. Hill.
364 The Modern European Novel (U,G). 4 hrs. cr. M T W Th F 9-11:30. W.W. Holdheim.

COMPUTER SCIENCE

- 102 Introduction to Computer Programming (U,G). 3 hrs. cr. M T W Th F 9-11:30. P. Orr.

ECONOMICS

- 101 Introductory Economics (U,G). 3 hrs. cr. M T W Th F 9:30-12. P. McClelland.
102 Introductory Economics (U,G). 3 hrs. cr. M T W Th F 9:30-12. V. Richards.
311 Intermediate Microeconomic Theory (U,G). 4 hrs. cr. M T W Th F 9:30-12. P. Pestieau.
312 Intermediate Macroeconomic Analysis (U,G). 4 hrs. cr. M T W Th F 9:30-12. J. Hagens.
331 Money and Credit (U,G). 4 hrs. cr. M T W Th F 9:30-12. U. Possen.
351 Industrial Organization (U,G). 4 hrs. cr. M T W Th F 9:30-12. W. Burnett.
685 (Also Latin American Studies 665) Workshop in Latin American Political Economy (G). 4 hrs. cr. M T W Th F 9-12. T. Davis.

ENGINEERING

- Chemical Engineering
IHE 110 Mass and Energy Balances (U,G). 3 hrs. cr. Self-paced audiovisual instruction only, at the convenience of the student. R.G. Thorpe.
Electrical Engineering
IEE 675 Switching Theory and Logic Design (U,G). 3 hrs. cr. Lecture, M T W Th F 9:10-15, 11-12:15. N.M. Vrana.
Mechanical Engineering
IMG 695 Wind Power and Geothermal Power (U,G). 3 hrs. cr. M T W Th F 8:10-30. D.G. Shepherd.

ENGLISH

- 328 Two Renaissance Masterpieces (U,G). 4 hrs. cr. M T W Th F 9:10-15, 11-12:15. S. Budick.
385 American Poetry (U,G). 4 hrs. cr. M T W Th F 9:10-15, 11-12:15. R. Morgan.
388 The Art of the Essay: Autobiographical Writing (U,G). 4 hrs. cr. M T W Th F 9:10-15, 11-12:15. S. McMillin.

GOVERNMENT

- 161 Liberalism, Conservatism, and Socialism: Introduction to Political Theory (U,G). 3 hrs. cr. M T W Th F 8:10-30. I. Kramnick.
316 The Crisis of the American Executive (U,G). 4 hrs. cr. M T W Th F 9:30-12. A.T. Dotson.
340 The Government and Politics of Latin America (U,G). 4 hrs. cr. M T W Th F 9:30-12. E. Kenworthy.
372 Law, Liberty, and Toleration (U,G). 4 hrs. cr. M T W Th F 9:30-12. E. Eisenach.

HISTORY

- 316 American Cultural and Intellectual History to 1820 (U,G). 4 hrs. cr. M T W Th F 11-12:15, 3:30-4:45. F. Somkin.
354 European Intellectual History in the Twentieth Century (U,G). 4 hrs. cr. M T W Th F 9:30-10:45, 12:30-1:45. D. LaCapra.
460 Politics and Culture in Ancient Greece (U,G). 4 hrs. cr. M T W Th F 8-9:15, 9:30-10:45. L.P. Williams.

HISTORY OF ART

- 336 The Medieval Illuminated Book (U,G). 4 hrs. cr. M T W Th F 9-11:30. R.G. Calkins.

INDUSTRIAL AND LABOR RELATIONS

- 360 Manpower and Organization Management (U,G). 3 hrs. cr. M T W Th F 9:05-11:35. W. Wolf.
403 Labor Dispute Settlement (G). 3 hrs. cr. M T W Th F 9:30-12:15. B.Yaffe.

MATHEMATICS

- 204 Math for Those Who Think They Don't Like Math (U). 3 hrs. cr. M T W Th F 9:10-15, 1-2:15. D. Henderson.

MODERN LANGUAGES AND LINGUISTICS

- French
133 French Elementary Reading Course II (U,G). 3 hrs. cr. Twenty hours of instruction each week. Staff.
German
133 German Elementary Reading Course II (U,G). 3 hrs. cr. Twenty hours of instruction each week. Professor and staff.

SPANISH

- 133 Spanish Elementary Reading Course II (U,G). 3 hrs. cr. Twenty hours of instruction each week. Professor and staff.

NATURAL RESOURCES

- 222 Environmental Conservation (U,G). 3 hrs. cr. M T W Th F 9:30-12. S.D. McRae.

PHYSICAL EDUCATION

- A limited number of physical education courses, in addition to that listed, will be offered during the summer providing sufficient registration is received.
Self-defense. M T W Th F 5:30-7:30 PM. M. Sherard.

PSYCHOLOGY

- 201 Introduction to Psychology as a Laboratory Science: Selected Topics (U,G). 3 hrs. cr. M T W Th F Lectures, 9:30-10:30. Lab, 12:30-2. N. Vanderveer.
281 (Also Soc. 281) Interpersonal Relations and Small Groups (U,G). 3 hrs. cr. M T W Th F 9:30-12. L. Meltzer.
325 Selected Topics in Psychopathology (U,G). 3 hrs. cr. M T W Th F 10-12:30. R.D. Mack.

SEMITIC LANGUAGES AND LITERATURES

- 243 The History of Ancient Israel: From Earliest Times to the Babylonian Exile (U,G). 3 hrs. cr. M T W Th F 9:30-12. D.I. Owen.
339 Studies in the Literature of the Old Testament (U,G). 4 hrs. cr. M T W Th F 9:30-12. C.M. Carmichael.

SOCIOLOGY

- 101 Man in Society (U). 3 hrs. cr. M T W Th F 9-11:30. D. Hayes.
281 (Also Psych. 281) Interpersonal Relations and Small Groups (U,G).

THEATRE ARTS

- 326 European Drama 1660 to 1900 (U,G). 4 hrs. cr. M T W Th F 9-11:30. M. Carlson.

URBAN PLANNING AND DEVELOPMENT

- 613 Neighborhood Theory (U,G). 3 hrs. cr. M T W Th F 9:10-15, 11-12:15. H. Hammerman.

SIX WEEK SESSION June 25-August 8

AFRICANA STUDIES

- 495 The Political Economy of Black America (U,G). 3 hrs. cr. M T W Th F 11-12:15. J. Seward.

ANTHROPOLOGY

- 103 Introduction to Cultural Anthropology (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. D.R. DeGlopper.
104 Evolution of Man (U,G). 3 hrs. cr. M T W Th F 8-9:15. J.R. Lukacs.
303 Prehistoric Archaeology (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. S.C. Saraydar.
322 Comparative Religious Systems (U,G). 4 hrs. cr. M T W Th F 12:30-1:45. D.R. DeGlopper.
354 Archaeology of the Americas (U,G). 4 hrs. cr. M T W Th F 12:30-1:45. S.C. Saraydar.
359 Field Archaeology in Mesoamerica (U,G). 6 hrs. cr. J.S. Henderson.

ARCHITECTURE

- 125 Issues and Methods in Architecture (U). 6 hrs. cr. Morning and afternoon sessions. J.P. Shaw, R. Crump, and others.
250 (Also Art 161) Beginning Photography (U,G).
356 Small Gauge Videotaping (U,G). 3 hrs. cr. M T W Th F 8:30-10:30. D. Shearer.

ART

- 121 Painting (U,G). 2 hrs. cr. June 25 - July 18. Section 1, M T W Th F 8:30-10:30. N. Daly. Section 2, M T W Th F 1-3. Instructor to be announced.
122 Painting (U,G). 2 hrs. cr. July 21 - August 8. Section 1, M T W Th F 8:30-10:30. N. Daly. Section 2, M T W Th F 1-3. D. Spyer.
132 Silk Screen Printing (U,G). 2 hrs. cr. June 25 - July 18. M T W Th F 1-3. G. Tiesson.
133 Silk Screen Printing (U,G). 2 hrs. cr. July 21 - August 8. M T W Th F 1-3. P. Thompson.
141 Sculpture (U,G). 2 hrs. cr. June 25 - July 18. M T W Th F 8:30-10:30. J. Squier.
142 Sculpture (U,G). 2 hrs. cr. July 21 - August 8. M T W Th F 8:30-10:30. J. Squier.
154 Life and Still Drawing (U,G). 2 hrs. cr. June 25 - July 18. M T W Th F 8:30-10:30. Z. Blum.
155 Life and Still Life Drawing (U,G). 2 hrs. cr. July 21 - August 8. M T W Th F 8:30-10:30. Z. Blum.
161 (Also Arch. 250) Beginning Photography (U,G). 3 hrs. cr. M W F 8:30-10:45, plus darkroom work, average two hours a day. G. Simjan.
261 Advanced Photography: Black & White (U,G). 2 hrs. cr. June 25 - July 18. M T W Th F 8:30-10:45, plus darkroom work. J. Kraft.
262 Advanced Photography: Color (U,G). 2 hrs. cr. July 21 - August 8. M T W Th F 8:30-10:45, plus darkroom work. S. Bowman.
270 Special Studios (U,G). Variable credit. Section 1, June 30 - July 18. Section 2, July 21 - August 8. By arrangement.

ASTRONOMY

- 105 A Rough Sketch of Our World (U). 3 hrs. cr. M T W Th F 11-12:15. V. Mansfield.

ATMOSPHERIC SCIENCE

- 101 Basic Principles of Meteorology (U,G). 3 hrs. cr. Lectures and laboratory. M T W Th F 9:30-10:45. B.E. Dethier.
438 Atmospheric Pollution (U,G). 3 hrs. cr. M T W Th F 11-12:15. B.E. Dethier.

BIOLOGICAL SCIENCES

- 100 General Biology (U). Lectures, M T W Th F 1:30-4:30. C.H. McFadden and staff.
301 Laboratory Methods in Biology (U,G). 3 hrs. cr. M T W Th F 1:30-4. L.D. Uhler.
318 Cellular Physiology (U,G). 3 hrs. cr. M T W Th F 11-12:15. M. Hinkle.
361 General Ecology (U,G). 3 hrs. cr. Lectures, M T W Th F 11-12:15. Afternoon field trips to be arranged. Staff.
431 Principles of Biochemistry, Lectures (U,G). 4 hrs. cr. M T W Th F 8-10. J.F. Deatherage, A.C. Ross, D.W. Seybert.
473 Ornithology (U,G). 6 hrs. cr. Lectures, M W F 8-9:15, plus morning field trips, 5:30-8, and two weekend trips. S.E. Weeks.

BUSINESS & PUBLIC ADMINISTRATION

- NMI 500 Communication for Administrators (G). 3 hrs. cr. M T W Th F 9:30-10:45. M.D. Morris.

CHEMISTRY

- 207 General Chemistry (U). 3 hrs. cr. June 25 - July 18. Lectures, M T W Th F 8-9:50. Recitations, T W Th 2-3. Laboratories, M T W Th F 10-1. S.T. Marcus and assistants.
208 General Chemistry (U). 4 hrs. cr. July 21 - August 8. Lectures, M T W Th F 8-9:50. Recitations, T W Th 2-3. Laboratories, M T W Th F 10-1. S.T. Marcus.

CLASSICS

- Greek
101 Greek for Beginners (U). 3 hrs. cr. June 25 - July 18. M T W Th F 8-9:15, 11-12:15. D.L. Malone.
103 Attic Greek (U). 3 hrs. cr. July 21 - August 8. M T W Th F 8-9:15, 11-12:15. D.L. Malone.
Latin
105 Latin for Beginners (U). 3 hrs. cr. June 25 - July 18. M T W Th F 8-9:15, 11-12:15. J. Clark.
106 Latin for Beginners (U). 3 hrs. cr. July 21 - August 8. M T W Th F 8-9:15, 11-12:15. P. Kirkwood.
204 Ancient Epic (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. W.R. Johnson.

COMPARATIVE LITERATURE

- 102 The Art of Narrative (U). 3 hrs. cr. M T W Th F 12:30-1:45. Staff.
103 Varieties of the Imagination in Literature (U). 3 hrs. cr. M T W Th F 9:30-10:45 or 11-12:15. B. Pedersen.
312 Comedy (U,G). 4 hrs. cr. M T W Th F 12:30-1:45. W.J. Kennedy.

COMPUTER SCIENCE

- 101 Survey of Computer Science (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. J. McGraw.
102 Introduction to Computer Programming (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. S. Owicki.
211 Computers and Programming (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. G. Jones.
314 Introduction to Computer Systems and Organization (U,G). 4 hrs. cr. M T W Th F 12:30-1:45. T. London.

ECONOMICS

- 101 Introductory Economics (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. R. Sheldon.
102 Introductory Economics (U,G). 3 hrs. cr. M T W Th F 11-12:15. J.T. Yoon.
311 Intermediate Microeconomic Theory (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. J.T. Yoon.
312 Intermediate Macroeconomic Analysis (U,G). 4 hrs. cr. M T W Th F 11-12:15. G. Staller.
335 Public Finance (U,G). 4 hrs. cr. M T W Th F 11-12:15. R. Sheldon.
361 International Trade Theory and Policy (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. T. Bayard.
367 Economic System (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. G. Staller.
369 Introduction to the Economy of China (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. S. Schmeiser.
371 Public Policy and Economic Development (U,G). 4 hrs. cr. M T W Th F 11-12:15. R. Caahan.
648 United States Presence in Latin America (U,G). (Also Gov. 688, Hist. 648 and Soc. 648). 4 hrs. cr. T Th 9-12. T.E. Davis and T. Holloway.
684 (Also IOE 738) Seminars in Advanced Economics (G). 3 hrs. cr. Hours to be arranged. B. Peleg.

EDUCATION

- 300 Field Experience (U,G). 1 to 6 hrs. cr. Staff.
400 Informal Study in Education (U,G). Credit and hours as arranged. Staff.
406 Field Natural History (U,G). 3 hrs. cr. M W 2-5:30. V.N. Rockcastle.
417 Psychology of Adolescence (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. F. Bail.
445 Teaching Reading and Study Skills (U,G). 3 hrs. cr. June 25 - July 15. M T W Th F 9:30-11:20, third hour to be arranged. W. Pauk.
446 General Curriculum Development (U,G). 3 hrs. cr. July 7 - July 25. M T W Th F 9-12. G.J. Posner.
470 Issues in Educational Policy (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. Staff.
500 Research and Development in Education (G). Credit as arranged. Staff.
511 Educational Psychology (U,G). 3 hrs. cr. M T W Th F 11-12:15. F. Bail.
546 Teaching Creative Writing and Language Skills (U,G). 3 hrs. cr. M T W Th F 12:30-2:30. C. Christensen, D. Lourie.
555 Use and Interpretation of Tests in Guidance and Personnel Administration (G). 3 hrs. cr. M T W Th F 8-8:50. Additional hour to be arranged. H.G. Andrus.
589 Affective Education (G). 3 hrs. cr. June 30 - July 18. M T W Th F 12:30-2:30. L. Ballinger, A. Pane.
600 Internship in Education (G). 2 to 6 hrs. cr. as arranged. Staff.

ENGINEERING

- Chemical Engineering
IHE 110 Mass and Energy Balances (U,G). 3 hrs. cr. Self-paced audiovisual instruction only, at the convenience of the student. R.G. Thorpe.
Civil and Environmental Engineering
IIB 303 Engineering Economics and Systems Analysis (U). 3 hrs. cr. R.L. Willis.
Electrical Engineering
IEE 210 Introduction to Electrical Systems (U). 3 hrs. cr. M T W Th F 9:30-10:45. W.H. Erickson.
Industrial Engineering and Operations Research
IOA 260 Introductory Engineering Probability (U). 3 hrs. cr. M T W Th F 8-9:15.
IOE 622 Operations Research I (G). 3 hrs. cr. M T W Th F 11-12:15.
IOE 738 (Also Econ. 684) Game Theory Seminar (G). 3 hrs. cr. Hours to be arranged. B. Peleg.
Mechanical and Aerospace Engineering
IMG 302 Technology and Society - A Historical Perspective (U). 3 hrs. cr. M T W Th F 11-12:15. B.J. Conta.

ENGLISH

- 135 Writing From Experience (U). 3 hrs. cr. M T W Th F 8-9:15, or 11-12:15. R.T. Farrell.
137 Workshop in Expository Writing (U). 1, 2, or 3 hrs. cr. N. Kaplan.
150 Poems and Stories (U). 3 hrs. cr. M T W Th F 8-9:15. P.L. Marcus.
157 American Fiction (U). 3 hrs. cr. M T W Th F 8-9:15.
159 American Literature and Culture (U). 3 hrs. cr. M T W Th F 9:30-10:45. R.T. Farrell.
202 Major English Writers (U). 4 hrs. cr. M T W Th F 9:30-10:45. N. Kaplan.
327 Shakespeare (U,G). 4 hrs. cr. M T W Th F 11-12:15.
366 Modern Poetry (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. P.L. Marcus.
380 Creative Writing Workshop: Explorations (U,G). 4 hrs. cr. M T W Th 11-12:15 and conferences to be arranged. J. Merod.
384 Advanced Poetry Workshop (U,G). 4 hrs. cr. M T W Th 3:30-4:45 and conferences to be arranged. J. Merod.
427 Hawthorne and Melville (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. M. Colacurcio.
470 Studies in the Novel (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. D.R. Schwarz.
475 Science Fiction and Fantasy (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. D. O'Connor.
666 Politics in the Novel (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. T. Jeffers.

GEOLOGICAL SCIENCES

- 101 Introductory Geological Science (U). 3 hrs. cr. June 25 - July 18. Lectures, M T W Th F 9:30-11:20. Laboratory, M T W Th 1:30-4. D.N. Peterson.
102 Introductory Geological Science (U). 3 hrs. cr. July 21 - August 8. Lectures, M T W Th F 9:30-11:20. Laboratory, M T W Th 1:30-4. D.N. Peterson.

GERMAN LITERATURE

- 109 Folklore and Folkpoetry (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. A. Berger.
699 Colloquium on the Teaching of Literature (G). 3 hrs. cr. Time to be arranged. A. Berger.

GOVERNMENT

- 111 American Government and Politics (U,G). 3 hrs. cr. M T W Th F 11-12:15. E.W. Kelley.
131 Comparative Government (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. D. Rosenberg.
161 Liberalism, Conservatism, and Socialism: Introduction to Political Theory (U,G). 3 hrs. cr. M T W Th F 11-12:15. E. Zashin.
181 Introduction to International Relations (U,G). 3 hrs. cr. M T W Th F 11-12:15. D.J. Driscoll.
329 Race, Education, and Politics (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. E.W. Kelley.
362 Why Men Revolt: Theories of Revolution (U,G). 4 hrs. cr. M T W Th F 8-9:15. I. Kramnick.
688 (Also Econ. 648) United States Presence in Latin America (U,G). 4 hrs. cr. T Th 9-12. T.E. Davis and T. Holloway.

HISTORY

- 116 Survey Course in American History (U). 3 hrs. cr. M T W Th F 9:30-10:45. T. McCormick.
314 The History of U.S. Foreign Policy in the Twentieth Century (U,G). 4 hrs. cr. M T W Th F 12:30-1:45. T. McCormick.
371 European History in the Twentieth Century (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. V. Lorwin.
471 Social and Economic History of Europe Since The Industrial Revolution (U,G). 4 hrs. cr. M T W Th F 2-3:15. V. Lorwin.

HISTORY OF ART

- 215 Introduction to Art History: Art of the Classical World (U,G). 3 hrs. cr. M T W Th F 11-12:15. C. Straughan.
260 Introduction to Art History: The Nineteenth and Twentieth Centuries (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. L.D. Lutchmansingh.
331 Art of the Medieval World (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. R.G. Calkins.
343 Art of the Italian Renaissance (U,G). 4 hrs. cr. M T W Th F 8-9:15. R.G. Calkins.

HOTEL ADMINISTRATION

- 161 Typewriting (U,G). 2 hrs. cr. M T W Th F 11-11:50. E.C. Seaburg.

HUMAN DEVELOPMENT AND FAMILY STUDIES

- 115 The Development of Human Behavior (U). 3 hrs. cr. M T W Th F 9:30-10:45.

INDUSTRIAL AND LABOR RELATIONS

- 100 History of Industrial Relations in the United States (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. J.O. Morris.
150 Survey of Industrial and Labor Relations (U,G). 3 hrs. cr. M T W Th F 11-12:15. J.O. Morris.
200 Immigrant Labor Movements in American History (U,G). 3 hrs. cr. M W 7-10 p.m. G. Korman.
302 Social and Cultural History of American Industrial Civilization (U,G). 3 hrs. cr. T Th 7-10 p.m. G. Korman.
710 Economic and Social Statistics (U,G). 3 hrs. cr. Lectures, M T W Th F 9:30-10:45. Laboratory, two sessions each week, to be arranged. I. Blumen.

MATHEMATICS

- 009 Precalculus (U). 3 hrs. cr. M T W Th F 9:30-10:45. Staff.
107 Finite Mathematics with Applications (U). 3 hrs. cr. M T W Th F 8-9:15. L. Wahlbin.
111 Analytic Geometry and Calculus (U). 3 hrs. cr. M T W Th F 8-9:15. S. Schatz.
112 Analytic Geometry and Calculus (U). 3 hrs. cr. M T W Th F 8-9:15. J. West.
121 Calculus (U). 3 hrs. cr. June 25 - July 18. M T W Th F 9:30-10:45, 2-3:15. D. Singer.
122 Calculus (U). 3 hrs. cr. July 21 - August 8. M T W Th F 9:30-10:45, 2-3:15. O. Rothaus.
200 Basic Concepts of Mathematics (U,G). 3 hrs. cr. M T W Th F 11-12:15. S. Chase.
213 Calculus (U,G). 3 hrs. cr. M T W Th F 11-12:15. T. Rishel.
303 History of Mathematics (U,G). 3 hrs. cr. M T W Th F 2-3:15. R. Platek.
331 Linear Algebra (U,G). 4 hrs. cr. M T W Th F 11-12:15. K. Dennis.
370 Elementary Statistics (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. Staff.

MICROBIOLOGY

- 290 General Microbiology, Lectures (U,G). 3 hrs. cr. M T W Th F 11-12:15. D. Kafkewitz.
291 General Microbiology, Laboratory (U,G). 3 hrs. cr. M T W Th F 2-4:30. D. Kafkewitz and staff.

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MODERN LANGUAGE AND LINGUISTICS
Linguistics
 101 Introduction to the Scientific Study of Language (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. Staff.
 214 Linguistics and the Teaching of English (U,G). 6 hrs. cr. M T W Th F 8-11. C.E. Elliott.
French
 101 French Basic Course I (U). 6 hrs. cr. Twenty hours of instruction per week. Staff.
 102 French Basic Course II (U). 6 hrs. cr. Twenty hours of instruction per week. Staff.
 131 French Elementary Reading Course I (U,G). 3 hrs. cr. June 25 - July 18. Twenty hours of instruction per week. Staff.
 132 French Elementary Reading Course I (U,G). 3 hrs. cr. July 21 - August 8. Twenty hours of instruction per week. Staff.
 203 Intermediate Conversation and Composition (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. Lectures, T Th 2-2:50. Professor and staff.
German
 101 German Basic Course I (U). 6 hrs. cr. Twenty hours of instruction per week. Staff.
 131 German Elementary Reading Course I (U,G). 3 hrs. cr. June 25 - July 18. Twenty hours of instruction per week. Staff.
 132 German Elementary Reading Course I (U,G). 3 hrs. cr. July 21 - August 8. Twenty hours of instruction per week. Staff.
 203 Intermediate Conversation and Composition (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. Lectures, T Th 2-2:50. Professor and staff.
Russian
 101 Russian Basic Course I (U). 6 hrs. cr. Twenty hours of instruction per week. Professor and staff.
 203 Intermediate Conversation and Composition (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. Lectures, T Th 2-2:50. Professor and staff.
Spanish
 101 Spanish Basic Course I (U). 6 hrs. cr. Twenty hours of instruction per week. Professor and staff.
 203 Intermediate Conversation and Composition (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. Lectures, T Th 2-2:50. Professor and staff.
MUSIC
 102 Western Music from Its Origin to the Present (U). 3 hrs. cr. M T W Th F 9:30-10:45. T.A. Sokol.
 111 Summer Session Choir (U). 1 hr. cr. Rehearsals: Tuesday evenings 7:15-9 p.m., Sunday mornings 9:30 a.m. D.R.M. Paterson.
 141 Rudiments of Music (U). 3 hrs. cr. M T W Th F 2-3:15. D.R.M. Paterson.
NATURAL RESOURCES
 210 Attitudinal Aspects of Our Environmental Dilemma (U,G). 3 hrs. cr. M T W Th F 11-12:15. M.K. Heiman.
 230 Diet for a Small Planet (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. J. Kelley, G. Birardi.
PHILOSOPHY
 101 Introduction to Philosophy (U). 3 hrs. cr. M T W Th F 11-12:15. T. Horowitz.
 232 Semantics (Logic and Language) (U). 4 hrs. cr. M T W Th F 12:30-1:45. G. Chateaubriand.
PHYSICAL EDUCATION
 A limited number of physical education courses, in addition to those listed, will be offered during the summer providing sufficient registration is received.
 Self-defense. M T W Th F 4-5 p.m. M. Sherard.
 Introduction to Modern Kodukan Sport Judo. M T W Th F 5:30-7:30 p.m. M. Sherard.
 Judo: Intermediate Course. M T W Th F 5:30-7:30 p.m. M. Sherard.
PHYSICS
 112 Physics I: Mechanics and Heat (U). 4 hrs. cr. Lectures and discussion, M T W Th F 11-12:15. Laboratory, T Th 2-5.
 213 Physics II: Electricity and Magnetism (U). 4 hrs. cr. Lectures and discussion, 9:30-10:45. Laboratory, T Th 2-5.
 214 Physics III: Optics, Waves, and Particles (U). 4 hrs. cr. Lectures and discussion, M T W Th F 11-12:15. Laboratory, T Th 2-5.
 490 Independent Study in Physics: Advanced Experimental Physics (U). 3 hrs. cr. H. Mahr.
 500 Informal Graduate Laboratory (G). 1 or 2 hrs. cr. M T W Th F 2-5. H. Mahr.
PSYCHOLOGY
 101 Introduction to Psychology: Bases of Human Behavior (U,G). 3 hrs. cr. M T W Th F 11-12:15. N. Bingham.
 102 Introduction to Psychology: Personality and Social Behavior (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. S.C. Jones.
 207 Theories of Motivation: A Personal Approach (U,G). 3 hrs. cr. M T W Th F 8-9:15. W. Simmons.
 215 Psycholinguistics (U,G). 3 hrs. cr. M T W Th F 11-12:15. B.S. Long.
 232 The Psychology of Woman (U,G). 3 hrs. cr. M T W Th F 2-3:15. S. Graetz.
 305 Visual Perception (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. P. Kaushal.
 309 Cognitive Development (U,G). 3 hrs. cr. M T W Th F 11-12:15. L. Spelke.
 310 Human Learning and Memory (U,G). 3 hrs. cr. M T W Th F 2-3:15. W. Hirst.
 323 Physiological Psychology (U,G). 4 hrs. cr. M T W Th F 9:30-10:45, with additional time to be arranged. I. Faust.
 325 Interpersonal, Humanistic, and Behavioristic Approaches to Personality Change and Psychotherapy (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. D. Ricks.
 327 Psychological Development Through the Life Span (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. D. Ricks.
 345 Experimental Directions in Afro-American Psychology (U,G). 3 hrs. cr. M T W Th F 12:30-1:45. M. Haltom.
 381 (Also Soc. 381) Social Psychology (U,G). 3 hrs. cr. M T W Th F 3:30-4:45. P. Schaffner.
ROMANCE STUDIES
French
 201 Introduction to French Literature: The Modern Tradition (U,G). 3 hrs. cr. M T W Th F 11-12:15. J. Beraud.
SEMITIC LANGUAGE AND LITERATURE
 100 Elementary Hebrew (U,G). 6 hrs. cr. M T W Th F 9:30-10:45, 12:30-1:45. J. Tamari.
 110 Elementary Modern Standard Arabic (U,G). 6 hrs. cr. M T W Th F 9:30-10:45, 12:30-1:45. B. Connelly.
 208 Agnon and Hazaz (U,G). 3 hrs. cr. M T W Th F 8-9:15. M. Pelli.
 338 Education in Biblical Antiquity (U,G). 4 hrs. cr. M T W Th F 9:30-10:45. W.M. Kelly.
SOCIOLOGY
 101 Man in Society (U). 3 hrs. cr. M T W Th F 8-9:15. E. Hackett and J. Gerson-Meinger.
 245 The Marketing of Self; A Course in Social Awareness (U). 3 hrs. cr. M T W Th F 9:30-10:45. A. Sembera and W. O'Neil.
 272 Urban Society (U). 3 hrs. cr. M T W Th F 11-12:15. F. Sparhawk.
 381 (Also Psych. 381) Social Psychology (U,G). 3 hrs. cr. M T W Th F 3:30-4:45. P. Schaffner.
 648 (Also Econ. 648) United States Presence in Latin America (U,G).
THEATRE ARTS
 242 Introduction to the Theatre (U,G). 3 hrs. cr. M T W Th F 9:30-10:45. L. Eilenberg.
 287 Summer Acting Workshop (U,G). 3 hrs. cr. M T W Th F 11-12:15.
 300 Directed Studies (U,G). Credit and hours to be arranged.
 377 Fundamentals of Cinematography (U,G). 3 hrs. cr. M T W Th F 12:30-3. D. Fredericksen.

252 Introduction to Experimental Organic Chemistry (U). 2 hrs. cr. July 14 - August 8. A continuation of Chem. 251.
 253 Elementary Organic Chemistry (U). 4 hrs. cr. Lectures, M T W Th 8-9:50.
ENGINEERING
Chemical Engineering
 IHE 110 Mass and Energy Balances (U,G). 3 hrs. cr. Self-paced audiovisual instruction only, at the convenience of the student. R.G. Thorpe.
Structural Engineering
 IIG 301 Structural Engineering I (U). 4 hrs. cr. Lectures, M T W Th F 9:30-10:45. Laboratory, M W 2-4:30. Staff.
MATHEMATICS
 192 Calculus (U). 4 hrs. cr. M T W Th F 8-8:50. A. Torchinsky.
 294 Engineering Mathematics (U). 3 hrs. cr. M T W Th F 8-8:50. A. Rigas.
PHYSICS
 101 General Physics (U). 4 hrs. cr. June 16 - July 11. Weekly group meeting, M 9:30-10:45, plus self-paced study and laboratory work. C.J. Naegele.
 102 General Physics (U). 4 hrs. cr. July 14 - August 8. Weekly group meeting, M 9:30-10:45, plus self-paced study and laboratory work. C.J. Naegele.
 500 Informal Graduate Laboratory (G). 1 or 2 hrs. cr. Laboratory, M T W Th F 2-5. H. Mahr.
 510 Advanced Experimental Physics (G). 3 hrs. cr. M T W Th F 2-5. H. Mahr.

SPECIAL PROGRAMS

The following Special Programs of the Summer Session are often scheduled for periods not consistent with the regular sessions offerings; and tuition rates, application procedures, registration process, etc., may also vary. For Special Programs offering academic credit, the courses are listed where known. In any case, the individual or department to contact for information and applications is indicated for each program.

ADVANCED PLACEMENT PROGRAM FOR SECONDARY SCHOOL JUNIORS
 June 25 - August 8
 Contact: Charles W. Jermy, Jr., 105 Day Hall.

AGRICULTURAL AND OCCUPATIONAL EDUCATION SUMMER PROGRAM
 July 7 - August 1
 Contact: William E. Drake, 204 Stone Hall.

One-Week Courses - July 7-11
 Agr. Engr. 412 Fundamentals and Maintenance of Tractor Electrical Systems (U,G). 1 hr. cr. M T W Th F 9-11:50, M T W Th 1-4. E.W. Foss and F.G. Lechner.
 Agr. Engr. 413 Golf Course Equipment and Turf Grass Maintenance (U,G). 1 hr. cr. M T W Th F 9-11:50, M T W Th 1-4. H. Davis, E. Foss, J. Kaufman, C. Winkelblech.

One-Week Course - August 4-8
 Educ. 433 Special Problems in Agricultural Education: Advising the FFA. (U,G). 1 hr. cr. M T W Th F 9-12, M T W Th 1:30-4. J.P. Bail.

Three-Week Courses - July 14 - August 14
 Agr. Engr. 423 Rural Water Supply and Sewage Systems (U,G). 2 hrs. cr. M T W Th F 8-9:50, M W F 1-5. E.W. Foss and F.G. Lechner.
 An. Sci. 458 Dairy Cattle Management (U,G). 2 hrs. cr. M T W Th F 10-11:50. Lab hours to be arranged.
 An. Sci. & Agr. Engr. Staff.
 Educ. 400 Informal Study in Education (G). Credit and hours as arranged. Staff.
 Educ. 500 Research and Development in Education (G). Credit and hours as arranged. Staff.
 Educ. 532 Methods and Materials of Teaching Agricultural and Occupational Education (U,G). 2 hrs. cr. M T W Th F 8-9:50. A.L. Berkey.
 Educ. 630 Seminar in Occupational Education (G). 2 hrs. cr. M T W Th F 10-11:50. N.K. Hoover.

ALUMNI UNIVERSITY
 July 16 - August 2
 Contact: G. Michael McHugh, 158 Olin Hall.

LIFE DOWN HERE AND UP THERE
 July 6-12 and July 20-26

REVOLUTION, TRADITION, AND CULTURAL CHANGE
 July 13-19 and July 27 - August 2

AQUATIC FIELD ECOLOGY PROGRAM
 June 9 - July 11
 Contact: Dr. John Forney, 118 Fernow Hall.
 Nat. Res. 630 Aquatic Field Ecology (G). 5 hrs. cr.

ARCHAEOLOGICAL FIELD PROGRAM
 June 10 - August 25 (tentative)
 Contact: Director, Archaeological Field Program, West Sibley Hall.
 Arch 541 Practice in Architectural Aspects of Archaeological Field Work (U,G). 6 to 8 hrs. cr. W.W. Cummer.

INTRODUCTORY PROGRAM IN ARCHITECTURE
 June 25 - August 8
 Contact: Director, Introductory Program in Architecture, 105 Day Hall.

ARCHITECTURE SUMMER DESIGN PROGRAM
 Schedule for design programs offered:
 8 weeks, 8 hrs. credit: June 4 - August 1
 6 weeks, 6 hrs. credit: June 18 - August 1
 Arch 200 Intermediate Architectural Design. 6 hrs. cr. M T W Th F 9-12, 1-5.
 Arch 301, 302 Advanced Intermediate. 9-12, 1-5.
 Arch 401, 402, 501, 502 Advanced Architectural Design. 8 hrs. cr. M T W Th F 9-12, 1-5.
 Arch 503, 504 Thesis. 8 hrs. cr.

EAST ASIAN LANGUAGE PROGRAM
 June 4 - August 15
 Contact: Eleanor H. Johnson (Japanese) or John McCoy (Chinese), Morrill Hall.
 Chinese 101-102 Elementary Chinese (Mandarin) (U,G). 12 hrs. cr. J. McCoy and staff.
 Chinese 421-422 Advanced Chinese (Mandarin) (U,G). 6 hrs. cr. J. McCoy and staff.
 Japanese 101-102 Elementary Japanese (U,G). 12 hrs. cr. E.H. Jordan and staff.
 Japanese 201-202-203-204 Intermediate Japanese (U,G). 12 hrs. cr. E.H. Jordan and staff.
 Korean 101-102 Elementary Korean (U,G). 12 hrs. cr. M. Sherard and staff.
 FALCON (Full-year Asian Language Concentration: Chinese (Mandarin) and Japanese).

ENGINEERING COOPERATIVE PROGRAM SUMMER TERM
 June 2 - August 30
 Contact: Director of the Engineering Cooperative Program, Upson Hall.

ENGINEERING SHORT COURSES
 Contact: R.H. Lance, Carpenter Hall.

ENGLISH AS A SECOND LANGUAGE
 June 25 - August 8
 Contact: Director, English as a Second Language, 105 Day Hall.
 Engl. 102 English as a Second Language (U,G). 6 hrs. cr. Twenty hours of instruction per week. C.E. Elliott.

ENVIRONMENTAL IMPACT OF NUCLEAR ENERGY
 August 18 - August 22
 Contact: K.B. Cady, Ward Laboratory.
 IPC 502 Environmental Impact of Nuclear Energy (U,G). 1 hr. cr.

EXPLORING THE VISUAL ARTS FOR HIGH SCHOOL JUNIORS
 June 30 - August 1
 Contact: Director, Exploring the Visual Arts for High School Juniors, 105 Day Hall.

FAMILY COMMUNICATIONS
 July 6-12
 Contact: G. Michael McHugh, 158 Olin Hall.

FIELD NATURAL HISTORY
 July 20-26
 Contact: G. Michael McHugh, 158 Olin Hall.

FRESHMAN SUMMER-START PROGRAM
 June 25 - August 8
 Contact: M. Brownell, 105 Day Hall.

GERMAN SUMMER PROGRAM
 Dates to be Determined.
 Contact: D. Bansberg, 172 Goldwin Smith Hall, or R.L. Jones, 203 Morrill Hall.

GOURMET COOKING AND WINE TASTING
 July 20-26
 Contact: G. Michael McHugh, 158 Olin Hall.

HOTEL AND RESTAURANT ADMINISTRATION
 June 16 - August 1
 Contact: Edna Osborn, Statler Hall.

HORTICULTURE FOR THE ENTHUSIASTIC GARDENER III
 July 13-19
 Contact: G. Michael McHugh, 158 Olin Hall.

HUMAN ECOLOGY UNIT COURSES
Design and Environmental Analysis
 June 25 - August 8
 Contact: B. Reschke, Martha Van Rensselaer Hall.
 DEA 102 Design Fundamentals 1b (U). 3 hrs. cr. M T W Th F 1-4. R. Coppola.
 DEA 108 Introduction to Color (U,G). 3 hrs. cr. M T W Th F 1-4. D. Ichiyama.
 DEA 115 Drawing (U,G). 3 hrs. cr. M T W Th F 8-11. T. Engelland.
 DEA 251 Historic Design I: Furniture and Interior Design (U,G). 3 hrs. cr. June 25 - July 16. M T W Th F 8:30-11. G.C. Millican.
 DEA 261 Fundamentals of Interior Design (U,G). M T W Th F 8-12, plus five hrs. a week to be arranged. G.C. Millican.
 DEA 341 Design: Ceramics (U,G). 3 hrs. cr. M T W Th F 12:30-3:30. T. Engelland.
 DEA 342 Design: Weaving (U,G). 3 hrs. cr. M T W Th F 9-12.
 DEA 349 Graphic Design (U,G). 3 hrs. cr. M T W Th F 9-12. D. Ichiyama.

Human Development and Family Studies
 Contact: B. Bricker, Martha Van Rensselaer Hall.
 HDFS 316 Adolescent Development in Modern Society (U,G). 3 hrs. cr. June 25 - July 25. M T W Th F 9-12.
 HDFS Adolescent Development in Modern Society (U,G). 4 hrs. cr. June 25 - July 25. M T W Th F 9-12, plus twelve hours of field work each week.
 HDFS 417 Community Action Programs for Youth (U,G). 2 hrs. cr. July 28 - August 8. M T W Th F 9-4. S. Hamilton and B. Sagan.

INTRODUCTION TO LANDSCAPE ARCHITECTURE
 June 4 - July 1
 Contact: J. Gentili, Sibley Hall.
 UPD/Arch 889 Landscape Architecture (G). 6 hrs. cr. M T W Th F, Section 1, History, Theory, and Scope. 9:30-12. L. Mirin. Section 2, Techniques and Applications. 1:30-4. J. Gentili.

LATIN AMERICAN LANGUAGE AND AREA PROGRAM
 Contact: T.E. Davis.
 Latin American Studies 665 Workshop in Latin American Political Economy (G).
 Quechua 131 Elementary Quechua (U,G). 3 hrs. cr. June 25 - July 18. M T W Th F 8-10, 11-1. D.F. Sola and staff.
 Quechua 132 Elementary Quechua (U,G). 3 hrs. cr. July 21 - August 8. D.F. Sola and staff.

MARINE SCIENCE SUMMER PROGRAMS
 Dates to be Determined.
 Contact: Director, Shoals Marine Laboratory, 202 Plant Science.
 Bio. Sci. 362 Introduction to Nautical Science (U,G). 3 hrs. cr. J.M. Kingsbury.
 Bio. Sci. 364 Introduction to Marine Science (U,G). 5 hrs. cr. J.M. Kingsbury and staff.
 Bio. Sci. 366 Seagoing Apprenticeship (U,G). 8 hrs. cr. E.C. Monahan, officers, and scientific staff of the R/V Westward.

MUSIC PROGRAMS
 Choral Music Program
 July 6-20
 Contact: T.A. Sokol, Lincoln Hall.

VIOLA DA GAMBA PROGRAM
 June 30 - July 11
 Contact: John Hsu, 326 Lincoln Hall.

ORNITHOLOGY FIELD SEMINAR
 For Adults and Family Groups
 June 1-7 and July 6-12
 Contact: G. Michael McHugh, 158 Olin Hall.

INSTITUTE ON POLICIES FOR SCIENCE AND TECHNOLOGY IN DEVELOPING NATIONS
 Contact: D.B. Lewis, 180 Uris Hall.

HISTORIC PRESERVATION PLANNING INSTITUTE
 June 8-13
 Contact: Director, Summer Institute, Center for Urban Development Research, 726 University Avenue.

PHOTOGRAPHY WORKSHOP
 July 13-19
 Contact: G. Michael McHugh, 158 Olin Hall.

TOPICS IN MODERN PHYSICS FOR TALENTED HIGH SCHOOL JUNIORS
 June 25 - August 8
 Contact: L.G. Parratt, Clark Hall.

READING AND STUDY SKILLS PROGRAM
 June 25 - August 8
 Contact: Director, Reading and Study Skills Program, 105 Day Hall.

THE THEATRE AS PERFORMANCE
 July 27 - August 2
 Contact: G. Michael McHugh, 158 Olin Hall.

WOMEN'S STUDIES
 Justice for Women: Rhetoric and Reality
 July 27 - August 2
 Contact: G. Michael McHugh, 158 Olin Hall.

EIGHT WEEK SESSION June 1-August 8

Cornell University Summer Session
 105 Day Hall Ithaca, New York 14853
 Phone: (607) 256-4987



News Conference Held on Finances

The nature of Cornell's financial problems and the short-range and long-range measures the institution is taking to meet them were major subjects at a news conference Monday morning, after the Board of Trustees' weekend meetings in New York City.

For the conference, held in the Statler Inn on campus, Board Chairman Robert W. Purcell and Trustee Stephen Weiss, chairman of the ad hoc committee on capital financing, flew up from New York to take part with local administrators and trustees.

Purcell said, regarding finances, "Nobody's in a state of panic. It's not that way at all. We have anticipated some of the problems that will face Cornell and all institutions of higher education, and have come forward with a program to handle these problems and at the same time preserve and strengthen the University."

Weiss said the committee's effort was one to strike a "delicate balance" on campus. "On the one hand, we don't want to delude people about the seriousness of our situation. On the other hand, we don't want to alarm people so they become paralyzed. This is a university of great strength."

Dean of the Faculty Byron Saunders, commenting on the question of the University's priorities, said that the "priority question will involve considerable faculty participation," noting that faculty groups are already at work in this area.

Regarding the 5 per cent cut-back in salary funds in the 1975-76 budget, Provost David Knapp said the administration believes most, if not all of this, can be reached by leaving vacated positions vacant, and by not filling vacancies of people on leave.

President Details Budget

Continued from Page 9

ment in physical plant by limiting laboratory and other renovations to the barest minimum. The Medical College also proposes an increase in its tuition by the greatest amount in the history of the school: \$1000. Dean Buchanan notes that this is possible only because of the large number of applicants currently available to the school. He also notes that the long range implications of an increase of this magnitude are difficult to assess.

The Medical College budget for the first time includes the full cost and associated income of the New York Hospital - Cornell Medical Group (Medical Service Plan). This creates a substantial (\$6.9 million) adjustment in overall University budgets and has been necessitated by the dissolution of the former group practice partnership to place full responsibility in the University for the administration of the program and control of funds.

The formal action to re-organize the Group Practice was taken approximately two years ago, and transactions under the Group Practice also will be included in this year's financial report. Since its re-organization, through introduction of stronger financial controls and closer monitoring of charges to the Group Practice, this program has been placed on a full cost recovery basis.

The estimates for the Medical College also include \$316 thousand anticipated income from the New York Hospital for use, on behalf of the School of Nursing, of three floors of the Muscle Disease Building. Total operating costs for this new facility are estimated at \$600 thousand; \$490 thousand for debt service will be derived from restricted funds.

School of Nursing

Tuition at the Cornell-New York Hospital School of Nursing will rise from \$2,050 to \$2,400. The nursing budget also relies on continuation of the New York State capitation program. There is some risk of this program's termination, but we would expect the New York Hospital to increase its present \$374 thousand contribution to instructional cost should this contingency develop. The Hospital also carries substantial support costs on behalf of the Nursing School, the major portion of which are recovered under reimbursement arrangements with third party agencies.

Concluding Comments

In closing, I would like to say a word both about the recommendation tuition increases and the proposed use of capital in the 1975-76 fiscal year.

Trustee Weiss noted at the December open meeting on tuitions that "Being for a tuition increase is like being for cancer." Every one of us regrets the circumstances which have thrust this substantial adjustment upon us. Although I believe that tuitions must continue to rise more or less in pace with inflation, I do not believe such adjustments can be expected to exceed the rate of inflation. Increases greater than inflation were effected throughout the period 1969 through 1973. The margin was one of the sources of funds which contributed to Cornell's ability - and to the ability of other comparable institutions - to prosper and grow. In the future, tuition appears an unlikely candidate to play this important role. Heightened competition for students among private institutions and with the public sector will add to the problem.

A substantial increase in financial aid funds is included in our estimates and we also

1975-76 Budget

Overall Totals Summarized

The overall budget for the University embraces a great variety of programs dependent on many different fund sources for which planning is at quite different stages of development. Thus, the budgets for the statutory units, although already accepted by Cornell's trustees, will over the next several months in all likelihood be substantially modified by responsible state bodies. Budgets for Federally sponsored programs and student aid will probably not receive final approval until still later - in many cases not until well into the year to which the budget is applicable.

These factors enormously complicate the University's planning and cause the summary totals which describe the University's overall budget plan to provide a rough representation indeed of the program which can in fact be implemented.

On this overall basis, the pro-

posed budget, at \$242 million, anticipates a 9.5 per cent expenditure increase over the budget presented one year ago for the current fiscal year but only 8.2 per cent over the current estimate of 74-75 expenditures. Most of this proposed increase basically reflects simply the impact of inflation. (In fact, however, the amounts estimated to be available for salary adjustments fall considerably short of the amounts required to cover the full inflation.) The remainder reflects in part the University's requests for additional state support, which may in fact fail to materialize, and anticipated growth in federal research

funding, which also is subject to future governmental action.

Program needs depend upon approval of tuition increases of \$345 per academic year (approximately 10 per cent over the present \$3,430 charge) in most of the endowed colleges at Ithaca, of \$1,000 in the Medical College, and \$150 to \$350 in the statutory units. These increases are larger than have applied over the past several years (or than we had hoped might be possible when first embarking on development of this budget) but are consistent with the criteria set forth in "Cornell in the Seventies" and a realistic estimate of current rates of inflation.

Current Budget Is About the Same

The current-year budget picture for the endowed colleges at Ithaca remains substantially unchanged from October's estimates, President Dale R. Corson told the Board of Trustees meeting this weekend in New York City.

The current estimate shows a slight reduction in the size of the anticipated deficit, from \$1.8 to \$1.74 million. Originally expected to be balanced or even to show a surplus, the endowed college budget received major revisions in October due to the impact of inflation and falling stock market values.

Savings in salaries and benefits of \$836,000 from positions vacated and not refilled, or "lapsed," have been about offset by increasing costs of utilities and other expenses, and a reduction in estimated income from athletics. Corson said, "In total it is difficult to predict whether we can improve our position during the remainder of the year. Un-

doubtedly we will have further salary lapses, and we hope there will be other savings with the hiring controls and cost-reduction programs that have been instituted."

The trustees approved supplemental appropriations of \$310,000 for the Medical College, including \$140,000 for increased utility costs. These increases were partially offset by an increase of \$167,000 in estimated income, leaving a net increase in the size of the estimated deficit of \$143,000. The Medical College deficit is now estimated to be about \$500,000.

Major adjustments in the statutory college budgets have been made, Corson told the board, to reflect the numerous changes made since they were approved by the trustees a year ago. The net effect of these adjustments is to increase statutory college income and expense by \$3.2 million, Corson said.

Part-Time Employees Under Retirement Plan

Two groups of part-time Cornell University employees will be included in the University's Contributory Retirement Income Plan (TIAA/CREF) as the result of action taken by the Board of Trustees last weekend in New York City.

Those to be included in the TIAA/CREF retirement plan are part-time faculty, a new academic status established by action of the board during its meeting. Also included will be endowed non-exempt personnel who are currently excluded from exempt status for the sole reason of salary, because of their part-time status.

The TIAA/CREF benefit eligibility will take effect on Feb. 3 for the non-exempt personnel who qualify and on July 1 for the part-time faculty.

The trustee action on retirement benefits was taken

because part-time faculty are to be eligible for all the rights, privileges and benefits that are available to full-time faculty. The change will establish equity in salary and benefits among personnel doing similar work, regardless of whether on a full- or part-time basis.

Chronicle

All items for publication in the Cornell Chronicle must be submitted to the Chronicle office, 110 Day Hall, by noon on the Monday preceding publication.



Sage Chapel Convocation

Berrigan, Repp on Program

Daniel Berrigan will speak at the first Sage Chapel Convocation of the spring term at 11 a.m. Sunday, Jan. 26.

Joining Berrigan for "an informal hour of sermon and songs" will be the composer and folk singer Ray Repp.

Berrigan, who was born in northern Minnesota, entered the Society of Jesus (Jesuits) in 1939. He was ordained in Boston in 1952, having completed his philosophical studies at Woodstock College, Md.

After six years as assistant professor of theology at Le Moyne College in Syracuse and extensive travel throughout Central Europe, Russia, Africa and Latin America, Berrigan became associate director for service for Cornell United Religious Work (CURW) in September 1967, serving in that capacity until April 1970.

A member of the "Catonsville Nine," Berrigan was tried for the destruction of Selective Service records in protest of the war in Vietnam. He was subsequently imprisoned in the Federal Correctional Institution in Danbury, Conn., and released in 1972.

He has since held positions at Woodstock Seminary, the University of Manitoba, and is currently guest professor in the department of religion at the University of Detroit.

Repp was one of the first composers to introduce folk music into worship services. His "Mass for Young Americans" was the first guitar mass ever published.

Repp came to Cornell in 1971 as a consultant in liturgical in-

novation, jointly sponsored by the Catholic, Episcopal and Lutheran communities. He recently founded M&R Production and Publishing Co. in Ithaca and is involved with the production of local talent groups for the commercial market.

Repp also serves as the Head Start Coordinator for Tompkins County.

Following the Sunday convocation, the public may join Berrigan and Repp in the cafeteria of Willard Straight Hall for an informal luncheon and conversation.

Women's Studies for Spring Lists Several New Courses

Cornell's Women's Studies spring semester courses not previously announced in the College of Arts and Sciences catalog include a new undergraduate course to be co-taught by a husband/wife faculty team. Other new offerings include studies in literature, political science, personality theory and anthropology.

Jennie Farley, director of the Women's Studies Program (WSP), said the new listings are:

—Women's Studies 100.1 "Freshman Seminar: 'The Black Woman in America'" MWF 11:15 a.m.; 3 hours credit. J.H. Brewer;

—Women's Studies 296 "Contemporary Women Novelists" MWF 1:25 p.m.; 3 hours credit. M. O'R. Rush;

—Women's Studies 353 (also Government 353) "Women and Politics" TTh 10:10-11:15 a.m.; 4 hours credit. M.F. Katzentein;

—Women's Studies 361 "Women Writers of Africa, Afro-America, and the Caribbean" MWF 1:25-2:40 p.m.; 3 hours credit. J.H. Brewer;

—Women's Studies 369 "Elizabeth I of England" TTh 1:25-2:40 p.m.; 4 hours credit. J.L. Ettin and A.V. Ettin;

—Human Development 400 (also Human Development 600) "Toward a Sex-Free Theory of Personality" time to be arranged; 3 hours credit. H. Feldman, and

—Women's Studies 422 (also Anthropology 422) "Special Problems in the Anthropology of Women" Th 2:30-4:30; 4 hours credit. R.A. Borker.

Health Insurance Costs Increase For Cornell Endowed Employees

Rising health costs have resulted in an increase in the Blue Cross-Blue Shield coverage on individual and family contracts for Cornell's endowed employees. The increases appeared in exempt employe paychecks on Jan. 16 and in today's paycheck for non-exempt employes.

Individual plans increased by 10.4 per cent or \$.58 while

family plans increased by 10.1 or \$1.51 per paycheck, according to Diedrich K. Willers, director, Office of Personnel Services.

"Despite this increase," Willers said, "members of the health insurance plan will pay a health insurance premium that will still be considerably lower than other less inclusive plans in the community."

University Lecture Committee

Spring Calendar Filled

The University Lectures Committee has announced that the number of requests for sponsorship of University lecturers this year was so large that the spring calendar is substantially filled and available funds appropriated. The committee is giving priority, therefore, to nominations of speakers in this country for only a short period and to topics that are especially timely. Nominations of other candidates should be for the fall semester, 1975, or thereafter.

The committee will meet again in early February. Nominations for the spring term must be submitted prior to that meeting. To assist nominators in preparing materials, the following guidelines have been developed:

1. The sponsorship of University lecturers should be interdisciplinary. The ULC is concerned with drawing persons who genuinely reflect the interests of various groups

within the University.

2. A nominating letter and one or more seconding letters are requested from the spokesmen for those groups or departments whose interest is represented.

3. Nominating letters should indicate as specifically as possible the topic of the prospective lecture.

4. Nominating letters should indicate the desired date for the lecture, i.e., the semester and/or month, or the specific date if a speaker is available only at one particular time.

5. A vita sheet and/or other appropriate supporting material should accompany the nomination.

6. The committee desires a statement concerning the prospective speaker's performance as a public lecturer.

7. If the nominee in question has an established fee for public lectures, please indicate the amount.

8. Nominators are requested

to work well in advance, several months preferably, in setting up projected lecture dates. In general the ULC can assure sponsorship of worthy speakers only if the calendar is open and after consideration of program balance. The secretary requests that all materials pertinent to a nomination be assembled at least five weeks prior to the date proposed, and that copy for posters advertising approved lectures be in her hands four weeks prior to the date of the lecture.

9. It is understood that the nominator of a University lecturer will undertake to act as his sponsor. Sponsorship involves corresponding with the prospective speaker concerning the matters mentioned above, and making specific arrangements, technical and social, for his reception on campus. Once a nomination is approved, the Secretary of the ULC will provide detailed in-

Continued on Page 19

Basketball Special: Tickets Are Half-Price

Cornell and Columbia, two basketball teams that have staged a series of tight struggles on courts here and in New York City, bring their act back to Barton Hall Friday at 8 p.m.

It'll be "Half-Price Homecoming Night" and all adult tickets will be priced at \$1, half price.

"The team is coming home after a tough three-game road trip and our students are back after their vacation. We hope this half-price deal will be an occasion when our local fans, students and players all sort of say 'It's nice to see each other again,'" Coach Ben Bluitz explained. The Cornell Band will also be back after a four-game absence.

The evening begins at 6 p.m. when the Cornell frosh meet the Binghamton junior varsity.

Half-time entertainment will be provided by girls from the Ithaca Gymnastics Center. Some 20 youngsters, ranging in age from 5 to 18, will perform a series of tumbling acts under the direction of Bob Martin, Cornell gymnastics coach.

Bluitz, in his first year at Cornell, has a better won-loss record than Columbia's first-year coach, Tom Penders. But the Lions won the first meeting last Friday in New York City and the Big Red is looking to even the score.

Cornell went into the final minutes of that game with a seven-point lead. However, three starters had fouled out and only one guard, Rex Parcells, was left to cope with the Columbia press. The Lions rallied to win, 84-81.

Flute-Keyboard Duo Concert

Jean-Pierre Rampal, flute, and Robert Veyron-Lacroix, keyboard, will perform sonatas by Vivaldi, Bach, Blavet and Martinu, and Bartok's "Suite Paysanne Hongroise" at 8:15 p.m. Sunday, Feb. 9 as the third event in the Statler concert series.

"Jean-Pierre Rampal is a superb artist, perhaps the greatest living flutist..." So began a Cornell Daily Sun review of the last performance of Rampal and Veyron-Lacroix at Cornell in Dec. of 1966.

The reviewer, Michael Utevsky '70, continued, "These two artists have worked together for a long time, and respond perfectly to each other's nuances and phrasing. This close rapport made them sound at times like one instrument."

The Ithaca Journal reviewer, Nina Sobelman, noted after the

same concert, "There is not much to be said about Jean-Pierre Rampal's flute playing, except that it approaches perfection.

"The most powerful impression which is retained of this concert — indeed, of all of Jean-Pierre Rampal's concerts — is not even of his virtuosity, his complete control, but of his very profound and personal love of music. This may seem at first obvious and elementary, but it is very rare indeed," she concluded.

This local praise for the two French artists has been echoed by reviewers in papers ranging from the New York Times to the New Orleans Times Picayune.

Ticket information for the concert may be obtained at the Lincoln Hall ticket office (256-5144).

Sociology Seminars Given Throughout Spring Semester

Outstanding European sociologists will present a program of seminars and colloquia on current trends in their specialties, during spring semester, the exact schedule to be announced later.

Sponsored by the Department of Sociology, the series is designed to offer Cornell faculty and graduate students an exposure to theories and ideologies that are not generally stressed in the United States.

The first visiting lecturer will be Hebrew University's Awraham Zloczower, known for his work on social stratification and mobility in Israeli society. Among other participants will be Donald MacRae, of the London School of Economics; Anthony Giddens, Cambridge University; and Alessandro Pizzorno, University of Milan.

The program, coordinated by Leonard Reissman, chairman

of Sociology, includes a four-credit seminar (Sociology 602) open to graduate students, as well as colloquia and informal discussion meetings. The seminar schedule necessarily varies from the usual weekly format, concentrating during the visits of the lecturers. At such times seminar meetings will be held twice a week, Tuesdays 1:30 - 3:30 and Thursdays 2 - 3:30. The date of the first meeting will be announced later.

A preliminary version of this program was held during the fall 1974 semester, with a colloquium series featuring Raymond Boudin, from the Sorbonne, and John Goldthorpe, of Nuffield College, Oxford University. While the theme of that series was also "Trends in European Sociology," participation then is not a prerequisite to the spring seminar, Soc. 602.

Corson on Cost-Cutting Measures:

MEMORANDUM

TO: The Board of Trustees
The University Faculty
The University Senate
FROM: Dale R. Corson
SUBJECT: The Deteriorating
Financial Scene

After several months of investigation and analysis I have come to the firm conclusion that we must undertake a strong plan of action to address Cornell's deteriorating financial condition. I do not believe that the current pressures will relax quickly, and even if the general economy improves soon I believe that strong measures will still be required. Unhappily there are indications that the situation may get worse. Several factors contribute to this conclusion:

1. *Inflation* continues to overwhelm us, in the cost of utilities and in other areas as well. There appears no prospect for any early relief from the high energy costs — oil, coal, and electricity. The high cost and limited supply of oil, together with notification by New York State Electric and Gas that we will receive no further natural gas allocation for at least a year, is forcing us to return to coal as our primary heating plant fuel. A further cost may well be a federal tax on oil. To do this and at the same time to comply with State and Federal environmental pollution regulations will require modifications in our heating plant likely to cost several million dollars.

2. We have operated so near the *limit of our resources* that we have no adequate cushion to absorb the shock of decreased revenues. The formula by which we have distributed annually 8 per cent of a five-year running average of the market value of a portion (the Capital Fund) of our invested funds has proved unwise. The sharp stock market losses have now placed us in the unhappy position of distributing a clearly excessive fraction of our Capital Funds in order to meet our financial obligations. Although the market value of our invested funds is still \$225 million, the drain of our unencumbered funds has now reduced the totally-liquid assets available to the Ithaca campus to about \$20 million, and the drain must be halted. Furthermore, it is now clear that our payout policy during the past several years has left us such a marginal reserve that we will be unlikely to distribute again such a large amount, even if the economy recovers and the market value of our invested funds is restored. Consequently, we must accept continuing reduced revenues from investments to support operating expense, no matter what happens to the economy.

3. *Federal legislation*, e.g. the Fair Labor Standards Act and the new Pension Reform Act as well as many other acts and regulations, has imposed an already heavy and still growing financial burden on us. The Pension Reform Act, for example, will add about \$500 thousand per year to our general purpose expenses beginning in 1976-77.

4. We have *borrowed money* for capital construction purposes which, in the light of a deteriorating economy, may be excessive. Our annual operating budget now bears an interest and amortization burden of approximately \$1 million for facilities (such as Uris Hall) which generate no income. Such a burden is a reasonable one for an operation the size of ours. However, should income-producing facilities (such as dormitories) fail to produce adequate income to meet the much larger debt service load they bear, the burden on general purpose funds would be intolerable. Consequently, we must provide for contingent possibilities, and above all we must undertake no new debt, except in the most unusual circumstances, once currently authorized projects are completed.

5. *Tuition* cannot be increased to a level which would fill the gap created by revenues from other sources which are either falling or are rising at a rate less than the inflationary rate. For the long range future, after the present inflationary economy has been brought under control, tuition must be tied to the general inflationary rate for goods and services or to the inflationary rate of per capita disposable income. During the period since World War II while all universities, Cornell included, have greatly expanded the size of their operations, tuition has increased substantially faster than the general cost of goods and services. I believe there is no possibility that rising tuition can support such growth in scope in the future. If other resources cannot maintain pace with rising costs and if tuition cannot be increased rapidly enough, there is no alternative to increasing the efficiency and reducing the scope of the operation.

These considerations, together with the impending decline in the number of college-age young people, make it hard to escape the conclusion that we are at the end of an era. The growth and the affluence of the last three decades and particularly of the last two decades are over. We can only decide our priorities and trim our programs to fit our resources. What Cornell must do is the same as what all of higher education must do, particularly what private higher education must do. We are not alone in our troubles, a fact which provides little solace, however, as we seek our new road.

The Trustee Ad Hoc Committee on Capital Financing (the Weiss Committee), whose appointment I recommended last spring, and in whose deliberations I have participated, has now completed its report. The Committee's conclusions regarding several of the points listed above have clarified my own thoughts and have done much to indicate the dimensions of the problem we face.

What has to be done? We must increase the efficiency of our present operation, we must

increase our revenues by every reasonable means, and we must reduce the scope of our operation. The decisions necessary to bring about the required changes will be painful in the extreme. They can only be made by the President, but they cannot be made precipitately nor can they be made without the input, the help, and the advice of the best thinking in the entire University community.

One of our first tasks must be to determine the magnitude of the dollar gap to be filled by whatever means is most appropriate. Pending a careful determination of the reduction required, I can only indicate the general magnitude likely to be necessary. From my present estimate of the problem, it appears that over the next three years (i.e. '75-'76, '76-'77, and '77-'78) we must remove something like 15 per cent of that portion of our operation which is supported by general purpose unrestricted funds. Should 15 per cent prove the correct figure, it would represent about \$10 million (1974 dollars). How these cuts are staged (i.e. how much is to be accomplished in each of the three years and particularly in the last two of the three-year period) can be determined only after extensive study. The process will be difficult at best and will require the understanding and the help of everyone.

Principles. As we set about the task of cutting back our program, there are a number of principles we should always have before us.

1. The academic program is the *raison d'être* of the University. Everything else we do must be judged in the light of its effect on the quality of our student body, on the quality of our faculty, and on our ability to continue a high quality teaching and research operation. We must identify that which is uniquely Cornell and preserve it. Cornell University's primary mission, as the Weiss Ad Hoc Committee stated, is "to educate, to discover, and to render public service." All of our efforts in the months ahead must be dedicated to the preservation of this mission with the vitality and inventiveness which has always characterized Cornell.

2. Efficiency in the administrative and support machinery of the University must be the first point of attack. We must recognize, however, that we suffer from administrative complexity over which we have little control in some cases.

3. The Library must be a central point of concern, and here the problem is doubly difficult. Even before the present economic recession set in, the Library costs were rising at a frightening rate, and furthermore, we are reaching the capacity of our present Library facilities so that a major capital expenditure will be essential in the near future. It is imperative that we make sure the Library survives the present austerity period without serious damage, and

particularly that it survives without permanent damage.

4. We cannot achieve the required savings by uniform, across-the-board cuts. This would only guarantee mediocrity in the whole University. There is no way to escape the inevitable necessity to delete programs, painful though it will be. We must identify the strong programs and protect them. We must identify the programs that are weak and not susceptible to improvement without large expenditures and eliminate them.

5. We must take steps which are big enough to last at least five years, so that it will be unnecessary to start a new exercise in program cutting once the present effort is completed.

How shall we determine our priorities? I propose two approaches for studying the problems and for making recommendations about priorities: (1) a series of task forces on specific problems, particularly those related to administrative and support areas and those related to inter-college programs and (2) a college-by-college study under the supervision of the respective deans.

Each college study will necessarily be different from every other because the academic missions of the various schools and colleges are different. In examining its program each college must consider the relative strengths of its sub-fields and the relative emphases on the sub-fields it thinks desirable for the future. An overriding objective must be to maintain Cornell as a strong and exciting center of intellectual inquiry.

In each case I shall ask that means of increasing the efficiency of the present operation be examined and that recommendations be made on those parts of the present operation which will damage the University least if they are eliminated.

The task forces will be composed of faculty, students, administrative staff, and alumni as appropriate. I propose not to appoint task force members on any representative basis but rather to seek persons with particular qualifications for particular tasks.

I propose an overall, relatively small steering group to coordinate the entire effort. For a number of reasons it seems to me best to have a faculty member as chairman of the steering group. Consequently, I shall seek to recruit an appropriate faculty member, and I shall seek, through his dean, release of all or most of his time for this purpose. I propose that the president, the provost, the vice president for administration, the dean of the faculty, and a representative of the University Senate be *ex officio* members of the steering group.

I propose three roles for the new Budget Committee of the Faculty Council of Representatives, a committee which will be in place by mid-February: (1) to work with me and other senior administrative officers

in arriving at a decision on the magnitude of the program cut which is essential, (2) to work closely with the steering group throughout the period of the study with the aim of making the overall study as thorough and as equitable as possible, and (3) to assist me in evaluating the various studies and in establishing priorities among competing programs.

I propose task forces in two basic areas: (1) administrative and support services and (2) programs and policies bearing directly on the academic operation. I propose the following list of task forces for initial appointment:

1. *Administrative and support services.*

a. *Support staff.* This staff embraces administrative personnel, both in the central administration of the University and in the colleges, and staff in direct support of the faculty as in the case of secretaries and technicians.

Over the past 15 or 20 years, the overall support staff in the University has grown faster than has the size of the faculty. We must determine the type of support and the level of support which is essential to a high-quality program and seek to achieve that level over the three-year period.

b. *Administrative systems and administrative computing.* The complexity of administrative data handling systems and the amount of administrative computing have grown apace, in substantial measure in response to Federal legal requirements. We must assess the problem and distinguish between the essential and the desirable. Our goal must be to reduce the cost of these operations to the minimum consistent with meeting legal obligations and with adequate support for the academic program.

c. *Physical plant use and maintenance programs.* Operation of the physical plant is increasingly costly, and substantial deferred maintenance problems have accumulated. Policies to guide necessary expenditures in this area must be developed with the aim of providing adequate maintenance and at the same time reducing the operational cost.

d. *General services.* We now spend large sums in photocopying operations, telephone service, campus bus service, etc. Important savings are undoubtedly possible.

e. *Centralized vs. decentralized administrative services.* In a number of areas, for example in student admissions and recruitment and in fiscal accounting, there is duplication of services in the central administration and in the colleges. The optimum provision of such services must be examined with an aim to eliminate as much overlap as possible.

f. *Cost recovery.* University policy on direct cost recovery and on use of overhead recoveries from research grants and contracts should be re-

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Several Factors Contribute Heavily

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viewed.
2. *Programs and policies related to the Academic Mission.*

a. *Library.* The future of the Library is central to the entire Cornell operation, and the decisions made with respect to the Library are vital. These include both the support of ongoing programs and the provision for adequate physical facilities in the future.

b. *Centers and interdisciplinary programs.* One of the major changes at Cornell and other universities in the past ten to twenty years has been the development of interdisciplinary programs, primarily in research fields but also to some degree in instructional programs. Some of these have attracted substantial interest and support, while others have languished. Development of criteria for judging the quality of such programs and for assessing the desirability of their continuation must be developed, as must criteria to be used in their abandonment.

c. *Minority programs.* The University has undertaken a variety of educational and employment programs for

minority members of the population. We must protect our gains, but at the same time we must make sure that the goals are being pursued efficiently.

d. *Student services.* Over the past ten or twenty years many new student services in the advising, counseling, student health, and other areas have been introduced. Again, we must determine those which are essential and those which can be abandoned or returned to faculty responsibility.

e. *Publications.* We spend large sums each year for a wide array of publications. We must assess the role these publications play in the University's operation and determine which are essential and which can be consolidated or abandoned.

f. *Learning environment.* Some students have an unusually good experience at Cornell while others are subjected to circumstances which detract from their ability to make the most of their learning opportunity. Investigation of the learning environment with a specification of new programs or altered programs which might improve the learning environment is important.

g. *Financial aid policy.* Cornell now spends about \$8 million annually from general purpose funds for student financial aid. Another sum, nearly as large, from restricted funds also goes to financial aid. The policies underlying use of these funds must be examined to be sure that they are appropriate.

h. *Faculty compensation policy.* The faculty more than any other group in the University, determines the quality of the institution. Policies with regard to direct compensation and with regard to fringe benefits should be reviewed by a group including college deans and faculty members.

Some of the areas specified for task force scrutiny fall within the policy-making province of the University Senate. I propose to consult the Executive Committee of the Senate in specifying charges to these task forces and in determining their membership.

There are other areas which should be studied, but where the nature of the problem may dictate a different study vehicle. For example, there is the possibility of substantial inter-

college consolidation and cooperation. The Social Sciences and in particular the so-called Policy Sciences represent a good case. The first step at least is for the deans of the relevant colleges to undertake a study of the problem. Accordingly, I am addressing letters to particular deans on possible cooperative effort in social science programs and courses. Study of other areas, e.g. Statistics and possibly parts of Mathematics, may prove worthwhile. As these other areas appear, I shall ask the deans involved to undertake studies.

There will likely be other areas which will prove fruitful for study, as in the case of relations between the statutory and endowed colleges. As these areas become evident, I shall also seek appropriate mechanisms to provide the necessary appraisals and recommendations.

One important area where savings must be achieved is in the intercollegiate athletic program. This area of University activity is currently the subject of study by an ad hoc committee of the Board of Trustees. It was also studied last year by a policy study group in the University Senate. Pending a report by the Board of Trustees' committee in March and assessment of the recommendations in that report together with the recommendations of the Senate study, I propose to defer for the time being appointment of any further intercollegiate athletic study group. The Ivy Group Presidents have also embarked on a study designed to yield savings in the athletic area.

Some steps will be undertaken in concert with all the Ivy Colleges.

Who will make the decisions? The President, in consultation with the Provost and in consultation with the Deans, will make the final decisions and, where appropriate, the recommendations to the Board of Trustees. In making the final decisions, the President as well as the Provost and the Deans will need all the help and advice they can get, in particular from the faculty, from the University Senate, and from the various task forces.

Timetable. The only fixed date in the proposed study is dictated by the requirement for 1976-77 budget guidelines by Sept. 1, 1975. To meet this schedule final recommendations from the study groups must be in my hands by July 1. As task forces are established and work programs outlined, target dates for the accomplishment of specified tasks during the Spring Term and during the summer will be established.

In conclusion, I share the view expressed in the concluding remarks of the Weiss Committee report:

"Cornell is embarking on a new way of life with the need to reorder old and establish new priorities. A long and difficult road lies ahead. The task is just beginning.

"Education is concerned with people and human values. The changes which are ahead arouse both the hopes and fears of each of us. If together we face the future with honesty and courage, Cornell will endure as a distinguished University."

Energy Forum

'U.S. Diet Unsustainable'

The inability of the earth to support the current world population of four billion on an American-style diet was dramatized at last week's Energy Forum by Prof. David Pimentel.

Pimentel said that "as a result of overpopulation and resource limitations, the world is fast losing its capacity to supply adequate food."

He noted that although energy is a critical resource, shortages of arable land, rich soil, and water for irrigation also limit the earth's capacity

to produce additional food. But the striking increase in the rate at which energy is used in agricultural production has made it an especially important factor.

"While it took about 60 years for the U.S. population to double, the U.S. doubled its energy consumption during the past 20 years," said Pimentel.

"More alarming is the fact that while the world population doubled its numbers in about 30 years, the world doubled its energy consumption within the past decade. Moreover, the use

of energy in food production has been increasing faster than its use in many other sectors of the economy," he said.

He said that modern agricultural technology in the United States uses the equivalent of 112 gallons of fuel per person. If the energy expended on processing, food distribution and home cooking is included in this computation, this country's food production system uses about 336 gallons of fuel equivalents per person.

"Using U.S. agricultural technology to feed a world population of four billion on an average American-style diet, for one year, would require the energy equivalents of 1,344 billion gallons of fuel," Pimentel said. "But the known reserves of usable fuels have only 17,430 billion gallons.

"Therefore, if petroleum were the only source of energy, and if we used all petroleum reserves solely to feed the world population, the known fuel reserves would last a mere 13 years."

Pimentel stressed that there is another limit on the earth's ability to produce an American-type diet for its population. That restriction is cropland.

"About 1.4 acres of cropland are required to feed an individual in the United States with a diet high in animal protein. With four billion humans, the amount of cropland available worldwide is only nine-tenths of an acre per person," said Pimentel. "Therefore, the world population has already surpassed a density that could be fed a U.S. diet, given the available land and energy resources.

'Coal or Nuclear Plants Only Energy Sources'

Additional electricity to meet the nation's energy needs in the next few years will have to come from either coal-fueled plants or nuclear-powered plants, a University scientist said last week.

Prof. Cyril L. Comar, head of the Department of Physical Biology at the State Veterinary College, said that Americans have no choice except to build nuclear plants or coal plants.

Comar made the point in a talk at the Energy Forum held here under the sponsorship of the Task Force on Energy and Agriculture at the State College of Agriculture and Life Sciences, Cornell.

He said that other energy sources such as thermonuclear fusion, geothermal power, solar energy, wind power and tidal energy are so localized or uncertain at this stage that they cannot be used for power generation on a wide scale in the immediate future.

"They should be researched as intensively as feasible and brought into commercial production wherever possible to replace the more contaminating sources of electricity, but the plants we need to start building now must be either coal or nuclear," he stressed.

The risks for either type of plant are low, he said. "According to the best information we have, the probabilities for catastrophic accidents involving nuclear plants are so small that the risks come out very low.

"Our new generating plants will be a mix of coal and nuclear, and the biological costs of each will be acceptable in terms of associated benefits," he concluded.

"If we don't build additional plants," he warned, "There may very well be much greater biological costs from inadequate and unreliable sources of electricity."

'Food Facts and Fads' Series Is Scheduled

This semester's series of lectures on "Food Facts and Fads," which has traditionally been open to the public, will begin on Monday, Jan. 27, with a discussion of "Why and What Do You Eat?"

This lecture, as well as all the following Monday evening talks, will begin at 7:30 p.m. and will be held in the Uris Hall Auditorium.

This spring, the course will review the vegetarian and meat-eating fads, food sanitation, vitamin intake, packaging,

the energy demands of agriculture and man's best friend — the cow. Speakers will represent a broad range of disciplines at Cornell, including the Division of Nutritional Sciences, the Federal Nutrition Laboratory, and the Departments of Food Science, Animal Science, Poultry Science and Entomology.

Those interested in acquiring details on specific lectures should contact Prof. Frank Shipe, Stocking Hall.

Extramural Courses Open To Ithaca Area Residents

Area residents may register for spring term courses at Cornell University through the Division of Extramural Courses, according to Martin W. Sampson Jr., dean of the Division of Summer Session and Extramural Courses.

The Division of Extramural Courses was established to permit persons living in the general Ithaca area to take one or two courses each term for their personal interest and advancement, Sampson said. Almost every course offered

at Cornell may be taken by extramural students, subject to the instructor's approval and space limitations, he added. All courses carry regular University credit, and tuition is charged at the rate of \$85 per credit hour.

Registration for extramural courses will take place from Jan. 27 through 31. Further information and application forms may be obtained at the Office of Summer Session and Extramural Courses, 105 Day Hall (607-256-4987).

Summer Session Has New Courses

Anyone who would like to take part in an archaeological survey and excavation in the Chamelecon Valley of Western Honduras, or learn the principles and practices of videotaping or cinematography, or study the economics, politics, and ethics of the world food crisis might want to take advantage of some of the new course offerings available in the 1975 Summer Session at Cornell.

In addition to these courses, other new offerings featured this summer are "Math for Those Who Think They Don't Like Math," which will emphasize understanding of mathematical ideas and the relationship between mathematics and the "real world," and "Biological Literature," a course designed to give experience in the use and critical evaluation of biological literature, with training in scientific writing. According to the Dean of the Summer Session, Martin W. Sampson, Jr., this course is especially recommended for undergrads about to begin honors thesis research or

beginning graduate students lacking experience with the literature of biology.

Pre-med students will find several courses in the summer session that will satisfy requirements for graduation from Cornell and admission to most medical schools, such as the expanded lecture and laboratory course in organic chemistry, offering eight credits in eight weeks.

Total offerings for the Cornell Summer Session number well over 250 courses, with a variety of special summer programs in addition.

"The diversity of course topics offered in the summer at Cornell is almost as great as that of a regular semester," Sampson said. "Many students particularly enjoy the chance to study at Cornell when the weather is the best — they get a whole new perspective on what life in Ithaca is like."

Further information on Summer Session courses may be obtained at the Office of Summer Session and Extramural Courses, 105 Day Hall (256-4987).

Bulletin Board

Balinese Paintings on Display

Contemporary Balinese Painting exhibit will be on display in the Goldwin Smith Art Gallery, from Feb. 3 through Feb. 21. Gallery hours are 9 to 5, Monday through Friday.

Newsletter Announces Services

The "General Services Newsletter," published monthly, announces services and supplies available through General Stores, Typewriter and Instrument Repair, East Ithaca Laundry, Surplus Acquisitions, Graphic Arts and the Purchasing Department.

Anyone interested in obtaining the newsletter should call 256-5343.

CRESP Offers Newsletter

The Centre for Religion, Ethics and Social Policy (CRESP) is publishing a newsletter called "RE-VISION," whose title is taken from the Biblical proverb, "Where there is no vision, the people perish."

Each issue of "RE-VISION" deals with a specific theme. Future issues will deal with such topics as ethics and the law, the morality of sex and marriage, education and ethics, and ethics and work.

Anyone interested in obtaining copies of or more information about "RE-VISION" should call CRESP at 256-6486.

English for Foreigners

Spring term registration for English classes sponsored by the Cornell Campus Club for International Hospitality will take place today from 7:30 p.m. to 9 p.m. in the Founders Room of Anabel Taylor. These classes are open to any foreigner in the Ithaca community; beginning, intermediate, and advanced level classes will be held mornings, afternoons, and evenings every week day. The teachers are volunteers and any member of the Ithaca community interested in helping foreigners learn English is welcome to assist in this program. The cost is \$1 per term. For further information, telephone Margaret Fowler at 273-5263 or Florence Messing at 257-0646.

Genetics Talk Today

Richard C. Lewontin, Louis Agassiz Professor of Biology at Harvard and internationally famous geneticist, will speak on "The Diversity of Man and Other Animals" at 8:15 p.m. today, in Room 120 Ives Hall.

The lecture is sponsored by the University's Division of Biological Sciences and is the first in a series of biology colloquia which will feature experts in the life sciences. All colloquia are free and open to the public.

Lewontin, together with J.L. Hubby, discovered that the individuals of populations are genetically very dissimilar. He has used his data to help refute theories that race and IQ are related.

Sponsored Programs, Awards Received

The Office of Academic Funding announced the following new grants and contracts for sponsored programs for the Ithaca and Geneva units of the University.

Project Director	Department	Title	Sponsor	Amount	Period
Walker, J.C.G.	NAIC	Theoretical Study of the Ionosphere--Satellite and Ground Observations	NASA	25,000	1 yr.
Walker, J.C.G.	NAIC	Theoretical Investigations, Atmosphere Explorer Missions C, D, and E	NASA	40,000	1 yr.
Baker, R.C.	POULTRY SCI	Sea Grant--Utilization of Filleting-Human and Pet Food	NYS	11,200	1 yr.
Balluffi, R.W.	MATLSCI	Flux Pinning in Thin Film Superconductors	NSF	24,000	1 yr.
Bartel, D.L.	MECHAERO	Relationship of Mechanical Factors to Disorders--Locomotor Systems	NSF	60,062	2 yrs.
Bowering, J.L.	NUT	Grant-in-Aid	Graham Kerr	1,100	1 yr.
Bowers, R.	LASSP	Bulk and Surface Scattering Mechanisms in Metals	NSF	77,924	2 yrs.
Bowers, R.	STS	A Technology Assessment in the Area of Mobile Communications	NSF	139,948	1 yr.
Brown, T.L.	NATRES	Year IV Sea Grant--Impact of Salmonid Introductions on NY Communities	NYS	22,930	2 yrs.
Burns, J.A.	CRSR	An International Conference on Planetary Satellites	NASA	5,000	6 mos.
Capener, H.R.	RURALSOC	Hudson River Video Tape Project	Rockefeller	10,572	1 yr.
Capener, H.R.	RURALSOC	Workshop on Environmental Perception Values and Attitudes	Rockefeller	4,350	11 mos.
Capranica, R.R.	NEURO BIO	Mechanical Events Underlying Frequency Analysis in Auditory Organs	NSF	75,564	2 yrs.
Clemhout, S.	HUMEC	A Behavioral Model of Labor Force Migration	Labor	9,955	1 yr.
Constable, R.L.	COMPSCI	Mathematical Semantics of Very High-Level Programming Languages	NSF	59,619	2 yrs.
Dik, D.W.	COOPEXT	Orange County Health Education	NYS	5,450	1 yr.
Dik, D.W.	COOPEXT	Migrant Dental Education	NYS	30,025	14 mos.
Drosdoff, M.	AGRON	Soil Fertility in the Humid Tropics	AID	274,900	1 yr.
Eastman, L.F.	EE	Semiconductor Device Research and Education Facility	NYS	10,000	1 yr.
Eisner, T.	NEURO BIO	Chemical Ecology of Insects	NSF	25,000	1 yr.
Ewing, E.E.	VEGCROPS	Hormonal Control of Potato Tuberculosis	NSF	23,022	1 yr.
Feigenson, G.W.	BIOCHEM	Proton Magnetic Resonance Investigation of Lipid-Prot.	Research Corp.	4,800	1 yr.
Fisher, M.E.	CHEM	Statistical Mechanics of Condensed Matter	NSF	49,999	1 yr.
Fitchen, D.C.	LASSP	Heme Protein Solution Structure From Raman Spectra	NIH	47,349	1 yr.
Foltman, F.F.	ILR EXT	Related Instruction in Apprenticeship Research	NYS	2,000	1 yr.
Gibson, Q.H.	BIOCHEM	Kinetics and Mechanism of Ligand Binding by Hemoglobins of Fishes	NSF	33,973	1 yr.
Gillespie, J.H.	VET	Year IV Sea Grant--Comparative Virology--Study of Shellfish	NYS	49,774	1 yr.
Ginsburg, H.P.	HUMEC	Analysis of Children's Arithmetic Concepts	Univ. of Illinois	3,514	8 mos.
Gittelman, B.	LNS	US-Italy Cooperative Science Program	NSF	2,500	1 yr.
Gracen, V.E.	PLTBREED	Biochemical and Biophysical Mechanisms Maize Resistance to Pests	Rockefeller	35,000	8 mos.
Greenberg, D.P.	ARCH	Development of Computer Graphic Techniques and Applications	NSF	167,243	1 yr.
Greisen, K.I.	CRSR	Studies in Support of Analysis of Astronomical--Data from Apollo 16	NASA	12,190	1 yr.
Hammes, C.C.	CHEM	An Investigation of Multienzyme Complexes	NSF	50,000	2 yrs.
Hardy, E.E.	NATRES	Photo Interpreters for Updating Lunar Inventory & Studying Highway Impact	NYS	39,600	1 yr.
Hershey, C.S.	ARCH	Work Study Project Under the Comprehensive Planning Assistance	NYS	74,996	1 yr.
Hockett, C.F.	MODLANG	Fijian Grammar	NSF	13,000	1 yr.
Hood, L.F.	FOODSCI	Potential Antinutritional Effects in Modified Food Starches	NIH	33,784	1 yr.
Hood, L.F.	FOODSCI	Sea Grant--Year IV--Reclamation of Protein from Clam Wash	NYS	15,648	1 yr.
Hughes, R.E.	CHEM	NSF Assignment of R.E. Hughes as Senior Policy Analyst	NSF	24,340	5 mos.
Kallfelz, F.A.	VET	Biological Effects of Implanted Nuclear Energy Sources for Artificial Hearts	AEC	110,000	1 yr.
Kalter, R.J.	WATER RESOURCES	Energy Demand & Water Resource Management	INT	23,400	1 yr.
Kalter, R.J.	AGEC	Sea Grant--Year IV--Evaluation of Alternative--Continental Shelf	NYS	22,800	1 yr.
Karig, D.E.	GEOSCI	Evolution and Characteristics of Subduction--Indo-Pacific Region	NSF	30,981	1 yr.
Kochan, T.A.	ILR	The Effectiveness of Union Management Plant Safety Committees	Ford	10,154	18 mos.
Koslowski, B.	HUMEC	Evaluate Early Childhood Curriculum to Broaden Sex-role Standards	Fdn. for Child Dev.	5,733	1 yr.
Krumhansl, J.A.	LASSP	North American Rockwell Project	Rockwell Science Ctr.	55,000	1 yr.
Leibovitz, L.	VET	Sea Grant--Year IV--Diseases of Shellfish	NYS	7,050	1 yr.

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Job Classification Appeal Procedure

Appeals for review of job classifications assigned to Cornell's non-faculty endowed personnel in exempt categories must be started by Feb. 14, according to Nancy Elliott, compensation manager.

The appeals procedure began Jan. 6, after a Dec. 5 employe notification of classification and salary, as well as general policy and information for settling appeals. This came after implementation in the endowed units of the new system, which followed a year-long study of Cornell's exempt, non-faculty personnel.

To file an appeal, employes should request an appeals form by contacting the compensation manager's office, G-20 Uris Hall or by calling 256-7170, Elliott said. No classification appeals will be heard through the University's

personnel grievance procedures.

The appellant completes the portion of the form requiring the employe's current and the requested classification title and the respective salary grades. The appellant's reason for appeal must also be given.

If an appeal is being filed due to a change in the employe's duties or if the employe did not complete a job description form in October 1973, the appellant should request a new job description form with his or her appeals form, Elliott said.

The appellant gives the completed appeals form to the department head; subsequently the department head, the compensation manager and the dean or executive officer, in that order, decide on the appeal.

"If employes have any questions specific to filing an appeal, they may call my office," Elliott said.



Cornell Women Set New Record

These four exhausted Cornellians have good reason to smile having just completed a 24 hour marathon relay in Barton Hall establishing a women's indoor track record between Sunday and Monday afternoons (Jan. 19 and 20). The runners, who ran 130 miles and 1225 yards for an average of about 32 miles each, are, from left, Beth Rose, a sophomore; Kathie Young, a junior; Liz Brown, a sophomore, and Beth Miller, a junior. Coach Greg Page said "that to the best of my knowledge no previous women's indoor record had been set for the 24-hour relay." Page said their successful run was the first time a four-woman team completed the relay. "Their performance bettered the

best mileage total ever set by a five-woman team," he said. The clock ran continually during the Barton Hall relay, which began at 4:30 p.m. Sunday, but the women had four rest periods totaling about six hours. Page, a graduate student, coaches middle-and-long-distance runners for the Cornell women's track team. Young and Miller were co-captains of the women's cross-country team this fall and Brown is captain of the basketball team. All four women will be running distance races on the track team this spring. Miller and Rose are currently training for the local Boston Qualifier marathon to be held in March. Young holds the Cornell mile record.

Sponsored Programs, Awards Listed

Continued from Page 16

Lewis, A.	APPLIED ENGIN	Tunable Laser Raman Spectroscopy of the Visual Process	NIH	136,897	1 yr.
Lowe, J.W.	ACADEMIC FUNDING	Educational Service Agreement--Buffalo Dist Eng.	Army	1,715	1 yr.
Maylin, G.A.	VET	Memo of Understanding	NYS Racing Association	150,000	3 yrs
Maylin, G.A.	VET	Testing Agreement	NYS Racing Association	54,025	1 yr.
McFarlane, R.A.	PLASMALAB	Studies of Laser Induced Photochemical Kinetics	AF	39,000	1 yr.
Miller, J.G.	ILR	Planning & Compilation of a Thesaurus for Info on Public Sector Relations	Labor	80,092	1 yr.
Moen, A.N.	NATRES	Energy-Relationships of Homeotherms to Their Environment	NYS	45,000	1 yr.
Murra, J.V.	ANTHRO	The Role of Local Level Lords in Chimu and Chimu-Inca Empires	NSF	1,550	1 yr.
Nelkin, M.S.	APPLIED ENGIN	Statistical Physics of Turbulence	NSF	49,074	2 yrs.
Oliver, J.E.	GEOSCI	Seismic Reflection Profiling to Determine--Crust and Upper Mantle	NSF	378,115	1 yr.
Ott, E.	EE	Theoretical and Computational Studies of Irregularities in Auroral Electrojets	Comrce	26,330	1 yr.
Price, D.R.	AGENG	Sea Grant--Year IV--Beneficial Uses of Heated Effluents to Reduce Thermal Loading	NYS	6,000	1 yr.
Roe, D.A.	NUT	Physical Rehabilitation and Employment of WIN Recipients	Labor	87,733	9 mos.
Sangrey, D.A.	CIV+ENV ENGIN	Sampling and Testing Strategy for Leachate--and Surface Waters	NYS	30,350	9 mos.
Schultz, A.G.	CHEM	The Total Synthesis of Vernolepin and Vernomenin	NIH	46,215	1 yr.
Shallenberger, R.S.	FOODSCI	Sea Grant--Marine Sources of Industrial Enzymes	NYS	37,994	1 yr.
Swift, B.H.	CUDR	Problems Connected with Participation Under Unified Services Law	NYS	3,500	11 mos.
Torrance, K.E.	MECHAERO	Flame Spread Over Liquid Fuel	NSF	34,279	1 yr.
Wang, K.K.	MECHAERO	Computer-Aided Injection Molding System	NSF	103,856	1 yr.
Wasmuth, W.J.	ILR	Gaps in the Divivery of Services to the Severely Handicapped	Soc. Rehab. Service	7,500	1 yr.
Webb, W.W.	APPLIED ENGIN	Dynamics of Biophysical Membrane Processes	NIH	75,768	1 yr.
Wilkins, B.T.	NATRES	Year IV--Sea Grant Advisory Service-- New York State Sea Grant Institution	NYS	245,700	1 yr.
Wilkins, B.T.	NATRES	Year IV-- Sea Grant--Advisory Services Program--Eastern Lake Erie	NYS	19,700	1 yr.
Winter, G.M.	EDU	Evaluation of the Tri-County Program	NYS	1,608	10 mos.

LEGEND

NSF--National Science Foundation
 NFAH--National Foundation Arts & Humanities
 AF--Air Force
 INT--Department of the Interior
 NYS--New York State
 DOD--Department of Defense

GSA--General Services Administration
 DOT--Department of Transportation
 DCPA--Defense Civil Preparedness Agency
 AISI--American Iron & Steel Institute
 EPA--Environmental Protection Agency
 HSMHA--Health Science, Mental Health Administration

Alien Address

The Immigration and Nationality Act requires that every non-citizen in the United States, with the exception of diplomats and foreign officials, must report his address each year during the month of January. The report cards (Form I-53) may be secured only from the Post Office downtown (corner of Buffalo and Tioga Streets). It is important that the cards be filled out during January to avoid violating the law. The Post Office will not have the cards available after Jan. 31.

Campus Bus Schedule

Hours for the Cornell campus bus service have been reduced, with the first run beginning at 6 a.m. and the final run beginning at 6 p.m., according to David W. Brown, director, Office of Transportation Services. The policy took effect Monday.

The cutback is due to efforts to meet the current transportation budget and to changes in the hours worked by Cornell's custodial employes, Brown said.

In addition, express bus service operates only when classes are in session. "B" express buses will run from 7:42 a.m. to 8:06 a.m.; "A" express buses will run from 7:35 a.m. to 9 a.m. and from 12 noon to 1:30 p.m.

Brown said that "having a final bus run beginning at 6 p.m. will create difficulty for some staff members who use the peripheral parking facilities and whose formal job duties require them to work after 6 p.m. Any employes who encounter such difficulties should call the Traffic Bureau at 256-4600 or 256-4601 to arrange for suitable parking."

Employe Candidate

Cornell employes are encouraged to become employe candidates for the University Senate and for the Board of Trustees according to Diedrich K. Willers, Director of Personnel Services.

Petitioning for nine employe and one administrative employe Senate seats began on Dec. 2. For the first time, an employe seat is open on the Cornell University Board of Trustees.

Petitions for the Senate and employe trustee seats are available in the Senate Office. The deadline for filing petitions is 5 p.m., Tuesday, Feb. 4. The University Senate elections will be held on Feb. 18 and 19.

Supervisors and Department Heads are asked to encourage their employes to participate as Senators or as a representative of the employe on the Board of Trustees, and to allow employes the time necessary to serve in these capacities, Willers said.



Bulletin of the Faculty

(Publication of this Bulletin is supervised by the Secretary of the Faculty, Russell D. Martin, 315 Day Hall, 256-4843)

The Special Meeting of the FCR was called to order by the Provost David C. Knapp, at 4:30 p.m. on Wednesday, Jan. 22, 1975. He turned the gavel over to the Acting Speaker, Associate Professor J. Robert Cooke. The Speaker called on the Dean of the Faculty, Professor Byron W. Saunders, who made a brief report concerning the action of the Trustees in approving the resolution for part-time faculty and the necessary bylaw modification to implement it. He also announced the formation of the Trustees' Committee on Academics. He then made some summary remarks concerning President

Corson's memo about the procedures for implementing the recommendations of the Weiss Committee Report on Capital Financing.

The Nominating and Election Committee's slate of candidates for the new Committee on the University Budget was presented. Nominations were called for from the floor and the final approved slate now consists of the following:

Slate for COMMITTEE ON THE UNIVERSITY BUDGET
tenured non-FCR
three-year staggered term

3 to be elected
ALICE H. COOK, Professor Emerita, Labor Relations: Labor History, Labor Theory, Trade Union Structure and Functioning
SCOTT B. ELLEDGE, Professor, English
JAMES A. KRUMHANSL, Professor, Physics, Laboratory of Atomic and Solid State Physics
DAVID L. RATNER, Professor, Law
EDWIN L. RESLER, JR., Joseph Newton Pew, Jr. Professor of Engineering and Director of the Sibley School of Mechanical and Aerospace Engineering
SIDNEY SALTZMAN, Professor, Architecture, Art and Planning
ALAIN SEZNEC, Professor, French, Romance Studies
SEYMOUR SMIDT, Professor, Business and Public Administration
ROBERT S. SMITH, Professor, Farm Finance, Agricultural Economics
BERNARD F. STANTON, Professor and Chairman, Department of Agricultural Economics
ELIZABETH WIEGAND, Professor, Consumer Economics and Public Policy
non-tenured non-FCR
three-year staggered term
1 to be elected
PETER CHI, Assistant Professor,

Sociology
RICHARD E. SCHULER, Assistant Professor, Civil and Environmental Engineering and Economics
DOUGLAS E. VAN HOUWELING, Assistant Professor, Government

tenured FCR
three-year staggered term
3 to be elected
VINAY AMBEGAOKAR, Professor, Physics
DAVID J. DANELSKI, Goldwin Smith Professor of Government and University Ombudsman
WILLIAM MCGUIRE, Professor, Structural Engineering
J. GORMLY MILLER, Director, Cornell University Libraries and Professor, Industrial and Labor Relations
PETER C. STEIN, Professor, Physics, Laboratory of Nuclear Studies

non-tenured FCR
three-year staggered term
1 to be elected
J. CONGRESS MBATA, Associate Professor and Coordinator of the African Section, African Studies and Research Center
TERRY L. WEAVER, Assistant Professor, Microbiology, Food Science

Summer on Sailing Vessel Nets Credits

Continued from Page 1

The "Westward" is a 220-ton auxiliary powered staysail schooner, designed by Eldredge-McInnis and built in Germany in 1961. A descendant of the brigantine "Yankee," one of the most famous of the North Sea pilot schooners, she annually sails 20,000 miles in 250 days at sea, visiting ports throughout the world in her year-round educational program.

The "Westward" is manned

by seven officers, 18 apprentices, and two scientists. With a full ship's complement of 27 people, she can sail 50 days without provisioning.

"Introduction to Marine Science" has been the Shoals Marine Laboratory's primary summer offering since 1966. Designed to acquaint the college student with elementary aspects of the marine sciences ranging from invertebrate zoology to the economics of coastal zone management, "In-

roduction to Marine Science" emphasizes field study, natural habitats, and ecological interrelationships.

"Introduction to Nautical Science," a new course offering at the Shoals Lab, will cover aspects of navigation, seamanship, weather, naval architecture, and marine engineering.

John M. Kingsbury, director of the Shoals Marine Laboratory, said "The ability to put students aboard the 'Westward' means a great deal to the academic program of the laboratory," he said. "Opportunities to study oceanography aboard any vessel are rare for college students, and the 'Westward's' standing as one of the few large sailing vessels left today makes the experience that much richer."

Students who participate in the "SEA Semester" may find life at the Shoals Marine Laboratory and aboard the "Westward" considerably different from life ashore. The Shoals Lab is located on a 100-acre, uninhabited island 10 miles off of Portsmouth, N.H., in the Gulf of Maine. Students are housed three or four to a room, or in a 10-person military tent. Because the lab generates all its own power and pumps its own water, such amenities as showers are often limited.

According to Corwith Cramer, SEA's executive director, an apprentice's curtained bunk aboard the "Westward" is his only bit of privacy — and it measures just 76" by 30" by 30". Even when the weather is good, an apprentice doesn't

get a full night's sleep, Cramer said, because all the apprentices serve rotating watches. When the weather is bad, an apprentice may get no sleep at all, he added.

Yet, says Kingsbury, despite primitive living conditions, the great majority of the students who have sailed on the "Westward" or studied at the Shoals Lab rate those experiences among the most rewarding and most educational of their lives.

Participation in the "SEA Semester" is limited to 18 students, based on the capacity of the "Westward." Applicants may come from any college or university — not just Cornell — but must be acceptable to both the Shoals Lab and to SEA. Participation in the two introductory courses at the Shoals Lab — "Marine Science" and "Nautical Science" — is open to a total of 45 students from any accredited college by special application to the laboratory.

Total cost of the "SEA Semester" is about \$2,800 — roughly the cost of a regular semester at Cornell. The \$2,800 includes tuition, and room and board for 13 weeks, leaving only personal expenses and the costs of laundry and transportation to and from the Shoals Lab to the student.

Kingsbury said there is scholarship money available for students who would like to participate in the "SEA Semester" or in the other courses offered by the Shoals Lab but who might not be able to afford the fees. "The summertime is really the best time to study the marine sciences," he said. "Now that a student can earn a full semester's credit in one summer, it may be possible for him to take a spring or fall semester off from school instead of the summer to earn money or to take a vacation.

CIS to Award Research Grants

The Center for International Studies will award research grants in 1974-75 for Cornell faculty and graduate students. The deadline for application submission for both the faculty and student programs is Feb. 28, and notification of awards will be made by March 21, 1975.

Grants of up to \$2,500 will be awarded competitively to faculty members up to the rank of Assistant Professor for research of direct relevance to international or comparative studies. These grants may be used for research related travel, employment of a research assistant, released time for teaching, summer support, supplies and technical assistance including computer expenses.

Graduate student grants have a limit of \$500. Students whose research is on topics in international and comparative studies may apply, and applications will be reviewed competitively by a faculty committee. Grants are made for research related travel, technical assistance including computer expenses, and supplies or equipment directly related to research.

Further information and applications are available from the Center for International Studies, 170 Uris Hall, 256-6370.

NSF Seeks Research Proposals On Effects of Public Regulation

Proposals are being sought by the National Science Foundation for applied research on public regulation and economic productivity. The objectives of this program are to evaluate the effects of regulation on productivity and other aspects of performance, and to provide information and analysis that will enable legislators, federal, state and local regulatory bodies, and industry to increase the overall social effectiveness and equity of regulation. Specific categories are degree and type of regulation, organization of the regulatory process, service and product quality, subsidization, and pricing policies. Approximately 20 awards will be made totalling \$1,600,000.

Proposals must be received at NSF by Feb. 19, 1975. Further information on this program is available at the Office of Academic Funding, 123 Day Hall.

NSF Offers Faculty Fellowships For Study of Societal Problems

In order to help college and university science teachers increase their competence in areas concerned with our nation's societal problems, and their possible solutions, the National Science Foundation will award approximately 80 Faculty Fellowships in Science on April 11, 1975. These awards will be offered primarily to those proposing activities which promise to broaden the perspectives of college science teachers and thereby to improve their effectiveness in teaching and research directed toward the understanding and amelioration of societal problems.

Applications must clearly state the specific gains to be anticipated if a fellowship is received, and the contributions which the applicant hopes to make toward the objectives of this program. The fellowships, therefore, are not designed to provide support for research projects as such. Teachers who are unable to apply for fellowships tenable during all or part of an academic year may wish to consider the provision in this program which allows awardees to undertake their fellowship studies either in one summer, or in 2 or 3 consecutive summer periods.

Prospective applicants must have at least 5 years of experience in teaching science, mathematics or engineering. Tenures of these fellowships can be from 3 to 9 months, with stipends limited to \$2,250 per month.

An application must be submitted on the standard forms obtained from the Faculty Fellowships in Science Program, National Science Foundation, Washington, D.C. 20550. The deadline for filing applications is Feb. 7, 1975. A complete copy of the announcement can be seen at the Office of Academic Funding, 123 Day Hall.



CIVITAS Needs Volunteers For Projects

During the spring semester 1975, this column will continue to highlight the various human service agencies in the Tompkins County area, and provide a partial listing of some of the specific current volunteer needs in the community.

CIVITAS, Cornell's volunteer program, not only recruits volunteers for its group projects, but also helps meet the specialized needs for volunteer help requested by many agencies and services. Tompkins County is fortunate in also having an excellent Voluntary Action Center, which has been highly effective in its two years of service to the community. Together, CIVITAS and the Voluntary Action Center work to best assist the potential volunteer in finding the most effective placement of his/her skills and interests, and to coordinate efforts for the local agencies and services in finding the volunteers they need. CIVITAS is located in 320 Anabel Taylor Hall; the Voluntary Action Center's address is 201 West Clinton St.

Below are some of the current calls for volunteers. To respond to any of them, or to find out about other needs, please call either CIVITAS, 256-7513, Monday through Friday from 11 a.m. to 4 p.m.; or call the Voluntary Action Center, 272-9411, Monday through Saturday, from 9 a.m. to 1 p.m.

Dewitt Junior High School needs volunteer tutors to work with individual foreign language students, particularly students of French, during afternoon hours on any school day.

Boynton Junior High School needs a volunteer math tutor to work with an individual student for three periods a week. Possible times are 11 to 11:40 a.m. on Wednesdays, and 12:15 to 1 p.m. on other school days.

Big Brothers and Sisters are needed to spend a few hours a week with individual lonely children. Times and days can be at the convenience of the volunteer and child, and activities depend upon mutual interests.

Meadow House needs volunteers to work with handicapped adults by assisting in personal skills workshops, by providing a friendly supportive relationship with individuals, by assisting in recreational programs, or by assisting with in-Ithaca field trips. Times and days can be arranged to suit the volunteer's availability.

Storefront needs volunteers to staff their service and provide people with assistance and referral for housing, consumer, legal, or citizen's rights problems. Volunteers are also needed to provide assistance with Federal Income Tax forms during the tax period. Training for both types of service will be provided. Shifts from which to choose are from 9 to 11:30 a.m., 11:30 a.m. to 2 p.m. or 2 to 5 p.m. on any weekday.

Ithacare needs volunteers to assist with recreational programs, or to visit with individual elderly residents, at any time up to 9 p.m. of any day.

Broome Developmental Services - Tompkins County Branch needs a volunteer to develop and run an art workshop for a small group of teen-age boys at a center in the Slaterville Springs area. Weekends at any time would be best for the program, but other days and times can be arranged to suit the volunteer.

Tompkins County Jail needs a volunteer to develop and run an exercise program for inmates at the jail. Monday, Wednesday or Thursday from 1 to 4 p.m. are possible times for the programs.

4-H needs volunteers to assume leadership of 4-H youth groups in the City of Ithaca at North, Central and Southside locations. Late afternoon or early evening hours of weekdays, or anytime on weekends can be arranged to suit the volunteer.

Red Cross needs volunteers to be trained as Service to Military Families Caseworkers. The work is usually done by telephone, and the times during which the help is needed are on weekends, or on weekday evenings.

Ithaca High School needs volunteer tutors to work with individual students in general math, algebra, geometry, physics, chemistry, social studies or German. Times and days vary according to the subject, so please call for more information, either CIVITAS or the Voluntary Action Center.

Mental Health Association needs a volunteer to correspond with, and perhaps occasionally visit, an elderly, slightly retarded woman in the Trumansburg area.

Sage Notes

Continuing Graduate Fellowship Applications for 1975-76 are available in the Graduate Fellowship Office at 116 Sage Graduate Center. The deadline for submission is Feb. 3, 1975. Also, there is still time to apply for certain fellowships from sources outside Cornell; check the files in the Career Center.

Grades for fall semester for graduate students are available in the Graduate Office. They will not be distributed at registration.

Graduate students with problems or questions are asked to check with the Office next week, rather than registration days, Jan. 23 and 24.

The first spring fellowship checks will be available Feb. 5 at 1:30 p.m. at 130 Day Hall.

The Senate Page

The Senate Page is the official bulletin of the Cornell University Senate. Publication is supervised by Michael E. Fisher, secretary of the Senate. 133 Day Hall. 256-3715.

NEXT SENATE MEETING: Tues., Jan. 28, 7:30 p.m. Kaufmann Aud.

Calendar

WEDNESDAY, January 29
Parking and Traffic Subcommittee, 12:15 p.m., 128 Olin Hall
THURSDAY, January 30
Special Committee on Buildings and Properties, 12 p.m., Senate Office

Proposed Agenda

January 28, 1975
Kaufmann Auditorium
7:30 P.M.
1. Question Time
2. Minutes
3. Announcements
4. Agenda*
5. E-111 - COMMITTEE STAFFING RESOLUTION - PART IX (5,1)
6. SPECIAL RULE FOR

Petitions

Attention: Students, faculty, employees: Petitioning for Senate and Board of Trustee seats is now in progress. Pick up your petitions at the Senate Office, 133 Day Hall today. Petitioning ends Tuesday, Feb. 4, 1975.

CONSIDERATION OF APPROPRIATED BUDGETS (10,2)
7. E-35-a - Amendment to the Senate Constitution to Include a Community Bill of Rights (60,3)
8. E-91-a - REFERENDUM ON THE PHYSICAL EDUCATION REQUIREMENT (12,2)
9. E-98-a - ANOTHER ISSUE FOR THE REFERENDUM (12,2)

10. E-102-a - CALENDAR PREFERENCE REFERENDUM (16,2)

11. E-104 - 1975-76 ENTERPRISE BUDGETS OF THE DIVISION OF CAMPUS LIFE (30,2)

12. Adjournment

* The Executive Committee calls the attention of Senators to the importance and urgency of the questions on this agenda. Immediate action by the Senate is required if the Constitutional amendment and any of the referenda issues are to be involved in this year's election. If the Senate is not able to complete this agenda on the 28th, the Executive Committee is prepared to call a special meeting for Thursday, January 30th.

Current Legislative Log

BILL NO. & DATE SUB.	ABSTRACT	SPONSOR	COMMITTEE REFERRED TO
E-109 12/5/74	Would provide a source of income for the Housing department as well as aid the student population by installing change machines in the washing areas.	J. Marc Abrams	Housing Subcommittee
E-110 12/5/74	Proposes that no price increases at the cleaning facilities on campus go into effect until such facilities are working at maximum possible efficiency.	J. Marc Abrams	Housing Subcommittee
E-111 12/9/74	Further nominations to Senate committees.	Committee on Committees	Committee on Committees
E-112 12/9/74	Recommends alleviation of unnecessary waste of paper by using a better exam book.	J. Marc Abrams	Academics Committee
E-113 12/9/74	Clarifies the Senate Constitution by noting the minimum age requirement for trustees is stipulated by New York State Legislation.	J. Marc Abrams	Executive Committee
E-114 12/10/74	Allows for automatic extension of time for debate on a main motion during Senate proceedings.	R. S. Bogart	Executive Committee
E-115 12/16/74	Amends the bylaw provisions dealing with appointment of by-elected Senators and freshmen to committees.	R. C. Platt	Executive Committee
E-116 12/23/74	Recommends a policy of consultation with employee(s) at least one week prior to any action taken against that employee.	Committee on the University as an Employer	Committee on the University as an Employer

SENATE ACTIONS — December 3, 1974

SA NO.	TITLE AND ABSTRACT	SPONSOR	ACTION TAKEN
SA-297	REPORT TO THE CORNELL SENATE FROM THE PLANNING REVIEW COMMITTEE [Recommendations and study proposals on University budget and tuition matters]	Planning Review Committee	Accepted without prejudice
SA-298	RECOMMENDATIONS ON FINANCIAL AID [Recommends increased scholarship support in 1975-76 to cover tuition and cost of living increases; requires a report on scholarship and financial aid policies for 1975-76.]	B. Nichols	ADOPTED

Lecture Committee Procedures

Continued from Page 13
information on procedural matters.

10. In those instances where a lecturer is already being brought to campus by a group other than the ULC, and that group seeks joint sponsorship by the ULC or a contribution toward expenses, please include an estimate of expenses and a specific request for total or partial coverage. In general, the ULC will contribute to the honorarium, to expenses con-

ingent upon publicity and entertainment, and to travel expenses for the speaker only.

11. Please address documentary materials to the Chairman of the University Lectures Committee in the care of the Secretary of the Committee, Mrs. Jean Morehouse, Office of the Dean of the Faculty, 315 Day Hall. Inquiries can be addressed to Mrs. Morehouse, 6-4843, or to any member of the Committee. The present membership is: Jean F.

Blackall, English, Chairman; Marvin A. Carlson, Theatre Arts; W. Harry Everhart, Natural Resources; John W. Kronik, Romance Studies; Franklin A. Long, Science, Technology and Society; Don Randel, Music; Henry N. Ricciuti, Human Development and Family Studies; Thomas M. Christina, Arts '77; Eric S. Elice, Arts '77; Roger Howley, University Publisher, ex officio; Byron W. Saunders, Dean of Faculty, ex officio.

Calendar

January 23-February 2

Thursday, January 23

12-4 p.m. Registration for new and rejoining students. Barton Hall.

7 & 9:15 p.m. *Cornell Cinema Film: "Deliverance" starring Jon Voight and Burt Reynolds. Statler Auditorium. Attendance limited to Cornell Community.

7 & 9:15 p.m. *Cornell Cinema Film: "Modern Times" directed by and starring Charles Chaplin with Paulette Goddard. Willard Straight Theatre.

8 p.m. Lecture: "Personal Development through Transcendental Meditation". Ives 117. Sponsored by the Students' International Meditation Society.

9:30 p.m. Welcome Back Party featuring your favorite cartoon heroes. Multi-purpose Room, North Campus Union. Sponsored by N.C.U. Board.

Friday, January 24

8 a.m.-12 & 2-4 p.m. Registration for continuing students. Barton Hall.

5:30 p.m. Shabbat Eve service - Founders Room, Anabel Taylor Hall.

6 p.m. *Freshman Basketball - Binghamton. Barton Hall.

7 & 9:15 p.m. *Cornell Cinema Film: "Deliverance" starring Jon Voight and Burt Reynolds. Statler Auditorium. Attendance limited to Cornell Community.

7 & 9:15 p.m. *Cornell Cinema Film: "Modern Times" directed by and starring Charles Chaplin with Paulette Goddard. Willard Straight Theatre.

8 p.m. *Varsity Basketball - Columbia. Barton Hall.

8:30 p.m. Shabbat Eve service - lounge, Hi-rise #1, North Campus.

9:30 p.m. North Campus Record Hop. First Floor Lounge. Sponsored by N.C.U. Board.

Saturday, January 25

9:30 a.m. Shabbat services: Orthodox - Edwards Room; Conservative - Forum, Anabel Taylor Hall.

2 p.m. Fencing - Columbia. Teagle Hall.

2 p.m. Gymnastics Meet - Army. Teagle Hall.

2:30 p.m. Talmud study - Young Israel House.

3 p.m. Swimming Meet - Navy. Barton Hall.

6 p.m. Track Meet - Manhattan. Barton Hall.

7 & 9:15 p.m. *Cornell Cinema Film: "Deliverance" starring Jon Voight and Burt Reynolds. Statler Auditorium. Attendance limited to Cornell Community.

7 & 9:15 p.m. *Cornell Cinema Film: "Modern Times" directed by and starring Charles Chaplin with Paulette Goddard. Willard Straight Theatre.

8:15 p.m. *Cornell Polo - Valley Forge. Oxley Polo Arena.

9 p.m. Thirsty Bear Tavern 2nd Anniversary and Belated New Year's Eve Bash. Featuring music by "Calic" and "Casino Royale". First Floor Lounge and Multi-purpose Room, North Campus Union. Sponsored by N.C.U. Board.

Sunday, January 26

11 a.m. Sage Chapel Convocation: Daniel Berrigan, S.J., Guest Professor, Spring Term, Dept. of Religion, the University of Detroit; former associate Director of Cornell United Religious Work (1967-70); music provided by Ray Repp, Composer, Folk Singer, Guitarist.

7:30 p.m. *The Ithaca Ballet will present its Winter Performance. Statler Auditorium.

8 p.m. Israeli Cafe. One World Room, Anabel Taylor Hall.

8 p.m. *Cornell Cinema Film: "The Producers" directed by Mel Brooks, starring Zero Mostel, Gene Wilder, and Kenneth Mars. Uris Auditorium. Attendance limited to Cornell Community.

9 p.m. Bluegrass - Country Music Concert by Cornell Cutup with Wine & Cheese Specials. First Floor Lounge, North Campus Union. Sponsored by N.C.U. Board.

Monday, January 27

8 a.m. Spring term instruction begins.

7:30 p.m. Food Facts and Fads Lecture: "Why and What Do You Eat?" Uris Auditorium. Open to the Public.

7:30 p.m. Modern Jewish History - the past century. Discussion group. 314 Anabel Taylor Hall.

8 p.m. Lecture: "Violence in Postwar(?) America". Philip Berrigan. Ives 120. Sponsored by Interfraternity Council.

9 p.m. *Cornell Cinema Film: "Yojimbo" directed by Akira Kurosawa, starring Toshio Mifuni. Uris Auditorium. Attendance limited to Cornell Monday Night Club Members.

Tuesday, January 28

Women's Intercollegiate Bowling - Eisenhower College. Helen Newman Hall.

7:30 p.m. Fundamentals of Jewish Thought. Discussion group. Forum, Anabel Taylor Hall.

8 p.m. *Cornell Cinema Film: "Scarecrow" starring Gene Hackman and Al Pacino. Statler Auditorium. Attendance limited to Cornell community.

8 p.m. The Sierra Club is sponsoring a show on "Winter Camping and Cross-Country Skiing." Ives 110. Persons needing a ride should call Linda at 257-0891 by January 27th.

9 p.m. Thirsty Bear Tavern Old TV Show Series: "Journey To The Center of Time" - Twilight Zone. North Campus Union. Sponsored by the N.C.U. Board.

Wednesday, January 29

3:30 p.m. Dobro Slovo Spring Organizational Meeting. Slavic Studies students and all interested parties. 2nd floor lounge, Morrill Hall. Refreshments.

4 p.m. *Freshman Hockey - Princeton. Lynah Rink.

4:30 p.m. Fencing - Buffalo. Teagle Hall.

4:30 p.m. Food Science Seminar: "The Comparative Biochemistry of Muscle Contraction." Professor J.M. Regenstein, Dept. of Poultry Science, Cornell. 204 Stocking Hall. Refreshments at 4:15 p.m.

Hebrew Classes: Beginners - 7 p.m., Advanced - 8:15 p.m. Anabel Taylor Hall.

7:30 p.m. Hillel Council Meeting. G34 Anabel Taylor Hall.

8 p.m. *Cornell Cinema Film: "Lucia" Cuban film directed by Humberto Solas. Uris Auditorium.

8 p.m. *Varsity Hockey - Princeton. Lynah Rink.

Thursday, January 30

6 p.m. The Cornell Christian Science Organization invites students to a Reading and Testimony Meeting in the Founders Room, Anabel Taylor Hall.

7:30 p.m. Israeli Folk Dancing. One World Room, Anabel Taylor Hall.

7:30 p.m. "Pirke Avot" discussion of the classical text of Jewish Ethics. Forum, Anabel Taylor Hall.

Friday, January 31

4 p.m. *Zobo Funn Band in Concert. Anabel Taylor Auditorium. Sponsored by the Cornell Rock & Roll Society.

5 p.m. Women's Intercollegiate Basketball - Brooklyn College. Helen Newman Hall.

5:30 p.m. Shabbat Eve service. Founders Room, Anabel Taylor Hall.

6 p.m. *Freshman Basketball - Colgate. Barton Hall.

7 & 9:15 p.m. *Cornell Cinema Film: "American Graffiti" starring Richard Dreyfuss and Ronnie Howard. Statler Auditorium.

7 & 9:15 p.m. *Cornell Cinema Film: "Attica" directed by Cinda Firestone. Uris Auditorium.

7:30 p.m. *Freshman Hockey - Welland All-Stars. Lynah Rink.

8 p.m. *Varsity Basketball - Harvard. Barton Hall.

8:15 p.m. *Cornell Polo - Culver. Oxley Polo Arena.

8:15 p.m. Music Dept. Concert: Student Concert - Nancy Barrer, piano. Works of Messiaen, Chopin, Schubert, and Haydn. Barnes Hall.

8:30 p.m. Shabbat Eve Service, Lounge, Hi-rise #1, North Campus.

9 p.m. "Power Hour" - sponsored by Campus Crusade for Christ. Noyes Center, Room 308. Everyone welcome.

10 p.m. Dance: "Latin - Soul Disco". First floor lounge, North Campus Union. Sponsored by N.C.U. Board.

Saturday, February 1

9:30 a.m. Shabbat morning services: Orthodox - Edwards Room, Conservative - Forum, Anabel Taylor Hall.

12 noon. Track Meet - Army. Barton Hall.

1 p.m. Squash - Army. Grumman Squash Courts.

2 p.m. *Freshman Hockey - St. Lawrence. Lynah Rink.

2 p.m. Women's Intercollegiate Basketball - Niagara. Helen Newman Hall.

2:30 p.m. Talmud Study - Young Israel House.

6 p.m. *Freshman Basketball - Hartwick. Barton Hall.

7 & 9:15 p.m. *Cornell Cinema Film: "American Graffiti" starring Richard Dreyfuss and Ronnie Howard. Statler Auditorium.

7 & 9:15 p.m. *Cornell Cinema Film: "Jeremiah Johnson" starring Robert Redford. Uris Auditorium. Attendance limited to Cornell Community.

8 p.m. *Varsity Basketball - Harvard. Barton Hall.

8 p.m. Film: Yellow River Piano Concerto, Shenyang Acrobatics and other films from China. Willard Straight Theatre.

8:15 p.m. *Cornell Polo - Culver. Oxley Polo Arena.

8:30 p.m. *Square Dance. Memorial Room, Willard Straight Hall. Sponsored by the Cornell Outing Club and the Cornell student grange.

9 p.m. Ground Hog's Eve Dance featuring "Zoltan". First floor lounge, North Campus Union. Sponsored by N.C.U. Board

Sunday, February 2

11 a.m. Sage Chapel Convocation: Bryant M. Kirkland, Minister, The Fifth Avenue Presbyterian Church, New York City.

1 p.m. Volleyball Match against Nyack College. Barton Hall. Sponsored by the Cornell Volleyball Team.

4 p.m. Music Dept. Concert: Guest Artist Peter Lang, piano. Barnes Hall. Works of Bach, Beethoven, Debussy, and Schoenberg.

7 & 9:15 p.m. *Cornell Cinema Film: "Jeremiah Johnson" starring Robert Redford. Uris Auditorium. Attendance limited to Cornell Community.

Exhibits

Herbert F. Johnson Museum: The Museum reopens to the public at 10 a.m. on Jan. 18th. Selections from the permanent Collections: Jan. 22-Feb. 23, Recent Print Acquisitions and Promised Gifts 1973-74. Each year the Museum's print collection is greatly enhanced by outstanding gifts from generous alumni and friends. During the 73/74 season, these gifts viewed together with prints purchased by the Museum during the same period, are notable for their historical breadth, stylistic diversity and uniform high quality. Included in this exhibition will be graphics by Durer, Rembrandt and Whistler, as well as contemporary prints by Rauschenberg, Hockney, Moore and Pearlstein, all acquired since 1973. Museum hours: Tues.-Sat. 10-5; Sun. 11-5; Mon. closed. Wed. evenings till 9.

Olin Library: "Samuel Johnson and James Boswell." Rare books and prints commemorating the 200th anniversary of the publication of Johnson's "Journey To The Western Islands Of Scotland."

Sibley Dome Gallery: Jan. 27-Feb. 8. Student Photography

Announcements

STATLER DINING: Breakfast: Rathskeller - 7:30-10:30 a.m.; Lunch: (Jan. 23-25) Rathskeller - 11:45 a.m.-2 p.m.; (Jan. 27-29) Main Dining Room - 12-2 p.m., Cafeteria - 11:30 a.m.-1:30 p.m.; Dinner: (Jan. 23-25) Rathskeller - 5:30-7:30 p.m.; (Jan. 27-29) Main Dining Room - 6-8 p.m., Cafeteria - 5:30-7:30 p.m.

The Center for International Studies will award research grants in 1974-75 for Cornell faculty and graduate students. The deadline for application submission for both faculty and student programs is February 28. Notification of awards will be by March 21, 1975. Grants of up to \$2,500 will be awarded competitively to faculty members up to the rank of Asst. Prof. for research of direct relevance to international or comparative studies. These grants may be used for research related travel, employment of a research assistant, released time from teaching, summer support, supplies and technical assistance including computer expenses. Graduate student grants have a limit of \$500. Students whose research is of topics of international and comparative studies may apply and applications will be reviewed competitively by a faculty committee. Grants are made for research related travel, technical assistance including computer expenses, and supplies or equipment directly related to research. Further information and applications are available from the Center for International Studies, 170 Uris Hall, 256-6370.

Cornell University Press

Rush, Myron: *HOW COMMUNIST STATES CHANGE THEIR RULERS*. Publication date was Dec. 20, 1974, \$15.

Johnson, Christopher H.: *UTOPIAN COMMUNISM IN FRANCE: Cabot and the Icarians, 1839-1851*. Publication date was Dec. 30, 1974, \$17.50.

Dannhauser, Werner J.: *NIETZSCHE'S VIEW OF SOCRATES*. Publication date was Dec. 31, 1974, \$15.

Gransden, Antonia: *HISTORICAL WRITING IN ENGLAND: c.550 to c.1307*. Publication date was Dec. 31, 1974, \$37.50.

*Admission Charged.

Attendance at all events is limited to the approved seating capacity of the hall in which they are presented.

All items for the Cornell Chronicle Calendar must be submitted to the Office of Central Reservations, 32 Willard Straight Hall (either through the mail or by leaving them at the Straight desk), or call Carol Adams, 6-3515 at least 10 days prior to publication of the Chronicle. The Calendar is prepared for the Chronicle by the Office of Central Reservations.

Employee Seminar Scheduled

When asked what she thought "transactional analysis" (TA) meant, one Cornell employe participant in a recent "TA" seminar replied she thought the term referred to accounting procedures.

Her misconception caused many of the other 20 only-slightly-better-informed participants to laugh, breaking the ice on the two-day seminar "TA" offered during mid-January.

The group learned that "TA" is a technique for analyzing personal and interpersonal behavior rather than monetary transactions.

The "TA" seminar was conducted by a member of the

Niagara Institute of Behavioral Science, according to Gerald S. Thomas, director, training and development, Personnel Services. The seminar will be offered on Feb. 11 and 12 and on March 11 and 12 by

Thomas.

Supervisors interested in further information about this or other Personnel Services training and development programs for themselves and their employes should contact Thomas at 256-4869.