

The Tech

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Wentworth Institute and College of Technology has agreed to develop a new technical school in Iran. MIT, which has recently completed plans to train 54 Iranian students in nuclear engineering, will help oversee the Wentworth program.

Wentworth, MIT to aid Iran

By Mike McNamee

Wentworth Institute and College of Technology has signed a \$1.8 million contract to develop a technical institute at Shiraz, Iran, for the Iranian Imperial Organization for Social Services (IOSS). Wentworth announced this week.

MIT will participate in the program under a separate contract with IOSS, as an advisor on the development of the Iranian school, the announcement said.

The contract provides for a five-year program, in which Wentworth will train faculty and develop plans for the new school, which is expected to be constructed by 1977. IOSS plans for the new school, which will specialize in training mechanical and electronic engineering technologists, to have an enrollment of 100 students by 1980.

Also involved in designing the new school is Hugh Stubbins and Associates, a Cambridge-based architectural firm which specializes in design of educational facilities. Stubbins, with consultation from Wentworth, will design the physical plant of the school.

The program is described by Wentworth, a Boston-based technical school, as an attempt at constructing a "truly innovative institution fully geared to Iran's future growth and the need for industrial and engineering technicians."

"This school will serve as a prototype institution to influence the philosophy and practice of technical education in Iran," said Wentworth President Edward T. Kirkpatrick.

MIT involved

An advisory committee composed of at least three MIT faculty members will help to oversee the program under an MIT contract with IOSS. Professor of Metallurgy Morton Flemings, whose interest in technical education helped lead to the program's development, will serve on the committee, along with MIT faculty to be named later.

MIT's involvement with the Wentworth program began about 18 months ago, when the IOSS approached the Institute about developing such a program, according to MIT officials. MIT and IOSS discussed setting up a school for two-year post-secondary programs focused on engineering technologies, similar to the type of programs Wentworth conducts.

After an Iranian delegation visited MIT in October, 1972, Institute officials decided that MIT did not have the experience or capability to design the type of program IOSS wanted. MIT officials involved, including Dean of Engineering Alfred A.H. Keil, Sloan School Dean William F. Pounds, and Flemings, consulted with Wentworth, and then

decided to put the Iranian organization directly in contact with the technical institute.

"We decided it would be wiser to have the Iranians contract directly with Wentworth, rather than with MIT," Pounds told *The Tech* recently. "They wanted us to serve in an advisory (Please turn to page 6)

SCEP polls students on grades

By Gerald Radack

Undergraduates favor the continuation of the present system of grading, but with the "F" grade changed to "no record," according to a recent survey on student attitudes towards grades.

The survey revealed that students are "generally happy with the present system," said Louis Touton '77, chairman of the Student Committee on Educational Policy, (SCEP) which conducted the 21 question survey.

According to the survey, stu-

Fac continues P/F; plus/minus dropped

By Stephen Blatt

The faculty overwhelmingly rejected attempts to change the freshman Pass/No Credit system and voted against plus/minus grades in a series of advisory votes at its regular meeting Wednesday.

With over two hundred faculty and sixty students present, proposals by Professors James Melcher and Leonard Gould of Electrical Engineering to alter the pass/no credit system were defeated by large margins. A "sense of the faculty" resolution to reject plus/minus grades was passed 77-33.

The faculty, which has been discussing the report of the Ad Hoc Committee on Grading since November, tabled a recommendation of the committee which would allow a student to repeat a course for credit and to have only the second grade appear on the transcript. By a 111-2 vote, the committee's recommendation extending the senior pass/fail option to the junior and senior years and maintaining the other Pass/Fail

and Pass/NC options was passed.

In other business, the faculty recommended a Ph.D. program in Art, Architecture and Environmental Studies and decided 57-43 to hold a special faculty meeting within three weeks to discuss the nuclear engineering program for Iranian students.

The faculty, which has now considered six of the eight recommendations of the Grading Committee, will according to present plans, be presented at its next regular meeting April 16 with additions and amendments to the faculty rules and regulations to implement the recommendations of the Committee as amended by the faculty at its February and March meetings.

Following the votes to retain freshman Pass/No Credit, President Jerome Wiesner, chairing the meeting, cut off debate on the grading committee's proposals in order to allow consideration of other issues. After brief discussion of the Art, Architecture and Environmental Studies Ph.D. program and the (Please turn to page 3)

The controversy was created by faculty over whether to adopt the proposals of the Ad Hoc Committee of Grades, and amendments to the grading system proposed by certain faculty members.

The survey did not query students on their views about extension on senior Pass/Fail to the junior year, Neifield said, because that was not an issue when the survey was composed.

The results of some of the questions on the survey follow:

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
MIT's average cum of 4.3 is too high	SD		D			NO		A		SA
The grading system at MIT should be:										
A through F with plus/minus			SD				D	NO	A	SA
A-B-C-D-F	SD	D		NO			A			SA
A-B-C-D-No Record	SD	D	NO		A					SA
A student and his advisor should be able to remove courses and grades from the student's transcript	SD				D		NO	A		SA

SD - Strongly disagree
D - Disagree

NO - No strong feelings
A - Agree
SA - Strongly agree

Commons decision to be made today

By Mike McNamee

A provisional decision on re-instituting compulsory Commons in West Campus dormitories will be revealed at a meeting of the Dormitory Rate Review Committee today, according to the Dean for Student Affairs Office.

The Committee, which reviews dormitory rents and Commons charges each year, will be told "whether we will have compulsory Commons, or, if not that, when we will know whether compulsory Commons will be set up," Assistant Dean for Student Affairs Kenneth C. Browning '66 told *The Tech*.

The Committee is reviewing dining options for Commons contracts next year. Browning said, and will need information on whether compulsory Commons will be established to conduct its studies.

The Dean's Office statement that some decision will be made this week has been interpreted by dormitory officers who have discussed the issue with the Deans as meaning that compulsory Commons will probably be rejected. Earlier, Assistant Dean for Student Affairs Nancy Wheatley had been quoted as saying that the compulsory Commons decision will not be made until the end of April.

"They're either going to reject it now, or they're going to ride it out and make the decision as late as possible," one Baker House officer told *The Tech*. "If they make a final decision now, it will almost certainly be no compulsory Commons."

Browning, who told *The Tech* Wednesday night he had "some idea" of what the decision would be, refused to comment. (Please turn to page 7)



Campus patrolman Stanley MacIsaac displays the equipment in the new "Vanguard" ambulance which Campus Patrol has purchased in response to new Massachusetts health regulations and the the rapidly growing number of emergency ambulance calls. See story page 3.

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CP purchases new ambulance

By Danny Naddor

The Campus Patrol has purchased a \$15,000 "Vanguard" ambulance in response to a recently instituted Massachusetts Department of Public Health regulation raising ambulance standards and to the sharp increase in the number of emergency calls made last year.

Chief of the Campus Patrol James Olivieri told *The Tech* that the Department of Public Health regulation, which went into effect January 1, 1975, requires all providers of ambulance service to meet higher equipment and vehicle design standards, necessitating the purchase of the ambulance. Previously, the Campus Patrol had been using a multi-purpose van called an "ambulette" as its emergency medical vehicle.

Ambulance service for the MIT community, Olivieri said, has greatly expanded during the last two years, further emphasizing the need for the new ambulance. In 1974, 1,175 emergency ambulance runs were made, 325 more than the previous year's total. The ambulance runs, made primarily for MIT students and employees, and their relatives were in answer to emergencies that ranged from ankle injuries (6 cases) to heart attacks (10 cases).

East Campus requested the ambulance service more than any other dormitory, making 16 emergency calls; Baker made the least number of ambulance service requests — only one. Of the 1,175 emergency calls, 48 were considered "extreme emergencies," in which a life was at stake.

The purchase of the new ambulance was arranged through the Medical Department and the Chancellor's Office, and was financed by MIT's general funds.

A member of the Medical Department is training Campus Patrolmen in emergency medical care, in compliance with another Massachusetts Department of Public Health regulation requiring ambulance attendants to have 81 hours of such training.

Fac votes to keep P/F

(Continued from page 1)

vote to hold a special faculty meeting on the Iranian question, and with only twenty minutes remaining in the meeting, the faculty returned to consideration of the grades issue. Several faculty members asked for reconsideration of the amendment to add plus/minus grades.

At the February faculty meeting, Associate Professor Stephen Senturia proposed an amendment to the grading committee's proposals to add pluses and minuses to the grades of A, B, and C. This was subsequently amended to delete the A plus grade. The amendment was passed with little debate by a vote of 48 to 37.

Because the turnout at Wednesday's faculty meeting was larger and "more representative" of the faculty than the February meeting, faculty members argued that the question of plus/minus grades should be reconsidered at the meeting.

Although some faculty members, including Senturia, had left the meeting by this time, Wiesner, noting that "the faculty knows that regular meetings run till 5:30," called for a vote on a "sense of the faculty" resolution to reject plus/minus grades. The resolution, which passed 77-33, although not binding, will supersede last month's non-binding vote on the Senturia amend-

ment, according to Associate Provost Hartley Rogers.

Two amendments to the committee's recommendations were offered at the meeting which would have changed the nature of freshman Pass/No Credit in the second term an option available to the student, while Melcher's amendment would have eliminated the second term of Pass/No Credit entirely. Both amendments were defeated overwhelmingly.


"Students take subjects Pass/fail because they want to get them out of the way," said Melcher, who claimed that "the best way to insure Pass/Fail being around in five years is to limit it to one term now."

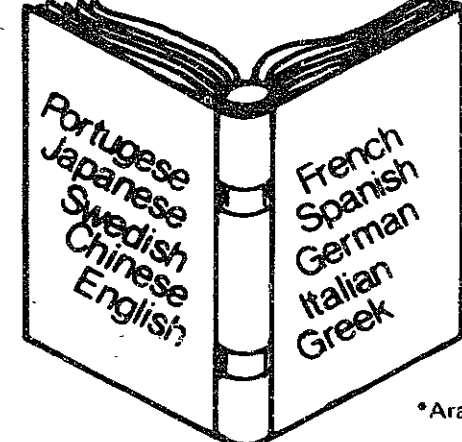
According to Melcher, "being ranked is being fair to people. The question is whether or not we are going to do it."

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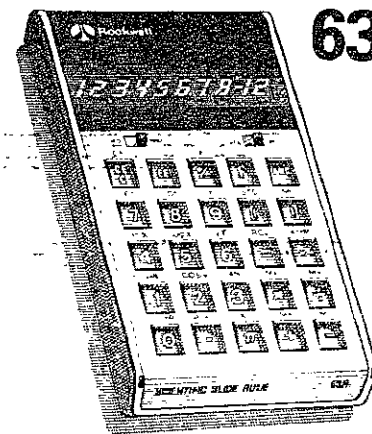
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Mark Peters



A 1970 view of MIT grading

By Wells Eddleman

In May 1969, several MIT students, including Steve Morrow '71, Lincoln Berland '71 and myself, formed the Grades Study Group (GSG) to investigate possible alternatives to the grading system at MIT. Professor F.J. McGarry of Civil Engineering helped us recruit faculty members to participate in this study. He also arranged a course for six units' elective credit for students working in the GSG. At the time, so we were repeatedly told, the faculty probably would not be receptive to still another proposal for changing the Institute. "They want to see how freshman Pass/Fail works out first," and so forth. So we never wrote up a final student report on our work. It is traditional for MIT committees to "just fade into the gray" at times and then return to life. Therefore, here is a report of some student members of GSG's research and proposals on the MIT grading system, circa 1970:

I. Introduction

If Mick Jagger and Keith Richard had attended the 'Tute, they might have written

Please allow me to introduce myself.

I'm a man who made the grade.

I've been around for a long long term,

Sold many a poor tool to waste.

Pleased to meet you; hope you guess my name;

But what's confusing you is just the nature of my game.

Views of the nature, purpose, and process of assigning grades at MIT and elsewhere are extremely diverse; indeed, often incompatible. To some, grades are an absolute standard of performance; to others, a relative standard of performance; an encouragement to effort; a reward for learning; a vague but ever-present threat of condemnation; a spur without which one cannot get up the effort to work; a corrupt and confused system of rewards that interferes with real learning; or, a pain in the ass. The various practices of assigning grades do not necessarily reflect the grader's view concerning grading's value. More usually, grading practice is determined by departmental tradition or statistical convenience. "There are two humps in the distribution of scores. The ones left of the leftmost hump's center are A's; those between there and the center of the right hump, B's; the rest, C's, D's and a few F's for those who didn't

even take the test." "We always grade this course 25% A's, 40% B's, 25% C's and about 10% F's. We want to drive out students who aren't dedicated to success in our department so we give a lot of F's and C's; at the same time we give plenty of A's and B's to encourage the students who will probably major in our department."

These are composite illustrations, but interested people should be able to find real professors now, just as we found in 1969, who espouse these methods and views.

In order to deal with the great range of views concerning grading, we shall report on the history of grading at MIT, our philosophy of the role of grading in a university, and our recommendations for changes in the present grading system.

II. History of Grades at MIT

In the old catalogues in Hayden Library, the history of grading systems at MIT is readily available. To our surprise, we found that MIT's first grading system was Credit/NoCredit - i.e. if a student passed the course, credit for having passed it was recorded. If the student failed, no credit was awarded. Later, this system was changed to P or F (Pass, or Fail) as the only grades. Still later, faculty wishing to recognize outstanding student work added the grade H (high pass, or honors) to P and F, but after some years, this experiment was dropped.

Students in the early 1900's desired more accurate evaluation of the quality of their work. In response to this desire, the grade H was reinstated, and other grades were added until the gamut ran: H (high pass), C (credit), P (passed), L (low pass), F (conditional fail), and FF (failed finally). Some bright person soon noticed an isomorphism between MIT's HCPLFF-FF system and the ABCDEF system then in use by most other schools and colleges. So, rather late in its history, MIT changed the names of its grades to A, B, C, D, E, (the old F) and F (the old FF). But the classifications of A (passed with Honor), B (passed with Credit), C (passed) and D (barely passed) retain the old system's definitions of grades, as can be seen in the current [1974-75] catalogue.

In all this history, no one defines standards for giving these grades; nor is there much said upon the purpose of grading; once faculty wished to recognize outstanding student achieve-

ment; later, some students desired more precise feedback on their work. Both desires continue today. Yet, what does "passed with honor" mean? Is it like "peace with honor"? Where is the dividing line between an honorable and a merely creditable performance? Between creditable and passing?

In a place as diverse as MIT, can standards be set to ensure that an A in political science denotes the same degree of honor as an A in electrical engineering? Failing that, can standards which both faculty and students believe are fair be established? We believe these are matters which faculty and students, working together, should consider in every department, as well as on a school-wide and Institute-wide basis. MIT grading systems of the past, as we have seen, were created by faculty and students. We believe this process should continue creatively.

III. Philosophy of the purposes, nature and proper processes of grading

Ideally, a grade should be a simple statement of one fact: how much a certain student has learned in a given course. Universities exist to promote learning or at least not interfere with it. "Low grades" in such a course would reflect not failure, but limits to the success students, their teacher(s) and, in the ultimate sense, the university had achieved. Lack of learning should indicate to students, faculty and administrators where additional efforts need to be made. Grades should first be feedback on learning.

Should grades also reflect achievement? We are ambivalent on this. We believe that the objective level of achievement should be recognized in some way by institutions of learning. This is the certification function of both schooling and grading. Certification of people's abilities is important - eg, if you are deciding which doctor you will ask to treat your illness, you certainly want to know which ones have demonstrated the ability to diagnose and treat diseases.

However, the use of grades primarily for certification detracts from motivation to learn. The person who begins a course far behind may learn a tremendous lot and still receive a B, while another, knowing more to start with, is lazy in learning yet still receives an A. Since we believe that motivation to learn comes best when it is not en-

forced, but rather desired, we do not advocate transferring the reward/threat function of grades from certification to learning. Instead, we believe that certification should be separate from grading, and should be done by examinations much like the present Advanced Standing exams.

The third current function of grades, which we believe should be eliminated insofar as possible, is the reward/threat function. Grades as they are currently assigned reflect any number of random and subjective factors. Yet these factors are ignored by the consumers of grades (graduate and professional schools, employers, government). They look at only the grades. Not only that, grade consumers use grades, in reality, not to let people in, but to decide whom to keep out. Thus even many students who say they need grades to perform well feel threatened by the grading system.

The realism of the threat may not be great. Nevertheless, people feel threatened, and that is the reality we address. We feel it a sad situation when students cannot do their best without threats or rewards external to their work. It would be dangerous to take the grade incentive/threat away from such students, though. What we question is the necessity for MIT to treat ALL students as though they needed to be threatened or rewarded in order to do good work. Who told Einstein he'd get a C if he didn't invent relativity? (It was not an accident that Einstein hated grades and requirements, we think.)

It is often said that since MIT graduates will be judged and graded in their careers, MIT must prepare them for it by judging and grading them now. To us, that is rather like a parent who, knowing her/his children may be beaten as adults, beats them continually during childhood. The result of such beatings could well be masochistic children. Likewise, we imagine that much of the "need for grades" expressed by students comes from continual Skinnerian conditioning in schools. But what if the parent taught the children to duck and dodge instead of beating them? What if MIT decided to engender excitement in learning in as many students as possible? We believe this would be a desirable course of action for the Institute, but we also feel that the needs of "Grade Addicts" must be sup-

plied. (See Recommendation 2 below.)

IV. Specific recommendations for changes in MIT's grading system.

1. Students and faculty in each department, in each school and on an Institute-wide basis should meet, discuss, research and evaluate any and all proposals for altering the grading systems now in use, before such proposals are implemented. We believe it is possible for different schools and departments to use differing grading systems in accord with the needs of their own students and faculty, providing only that the granting of MIT credit is standardized. Standards for awarding credit should be Institute-wide, based on agreement among schools, departments, faculty and students (or at least on workable compromise).

2. We believe that each student should have the option to select the grading system to be used for her or his performance in each course. Among such possible systems are: absolute performance standard, graded or achievement without reference to the rest of the class; relative standard (rank-in-class or grade on a curve); written or oral evaluation by student, teacher or both; a file of work done in the course, together with student and instructor comments; or no grading. Grades could be reported under one of several systems also. We believe the manner of reporting grade should be at the individual student's option. Under this system, students who need a certain type of grading to perform best could choose that form; student who perform better in another type of system (or no system) could choose that, independently. No student would be saddled with a grading system that impeded his/her learning.

We realize that implementing such a system would cause clerical strains and require more work from students, faculty and staff. However, we believe some such effort is the only way to pursue or resolve pluralistic conceptions of grading with fairness to everyone at MIT.

3. Pending consideration of the above, we specifically recommend that Pass/Fail be continued in the first year for all students, and that senior Pass/Fail, the option to take one subject per term outside one's major on a Pass/Fail basis, be

(Please turn to page 5)

The Op-Ed Page

Letters to The Tech

Gould: misquoted twice?

To the Editor:

The report of the Undergraduate Association-sponsored meeting which discussed the grading issue (*The Tech*, March 7) quoted my reply to a question raised by one of the students. The quotation has been taken out of context and leaves an ambiguous impression and as the issue is of such general importance I would like to clarify the point.

A student asked why when at a faculty meeting certain aspects of the grading issue were being discussed I was called upon as chairman of the Pre-Medical Advisory Council, to indicate how the change might affect those students interested in careers in medicine. He also asked, "How many such students are there?" My interpretation of the comment and question was that a small group of 'pre-medical' students were being given special consideration and that undue concern about their grades was the basis for grade inflation.

Grade inflation is not an isolated MIT phenomenon; it is endemic to all academia. Various hypotheses have been proposed to account for it but none of these claim that it's due to the attempts of faculty to assist students to gain admission to medical and law schools. However, now that inflation is a fact no school can assume that it can disregard grades or return to the rigorous standards of some years ago without endangering the chances of their students for admission to medical and law schools. In this sense candidates for admission to professional and graduate schools may be preventing a return to more meaningful grading systems. We are not chauvinistic enough to think MIT is different and can do what it likes without its students paying a price as students from other schools might. We might affect about 1000 pre-med and pre-law students who have elected to work as hard as they can to achieve their goals.

It is in this respect that I said that the Institute has an obligation to every student; to insure that whatever we do in these grading issues does not unnecessarily and unfairly impair the professional and pre-professional opportunities of a large percentage of our students whose aims are medicine, law, graduate work, engineering etc. etc. and place them out of competition; particularly in areas such as medicine and law where rigorous and inflexible guidelines monitor admission.

I said that it disturbs me that "pre-med" and "pre-law" students are singled out as the only ones that work for grades. I would like to think that most

students make a strong effort at least in the areas of their specialization and I see nothing unusual and no undermining of the system in an all-out effort on the part of "pre-meds" who have decided that it's worth it to them.

Bernard S. Gould
Professor of Biology

To the Editor:

On March 10 I sent you a letter with respect to the report in *The Tech* of the first Undergraduate Association-sponsored meeting on grading in which my remarks were taken out of context. My clarification has not yet appeared in *The Tech*. Since then you have reported (*The Tech*, March 18) the proceedings of the second meeting and obviously the state of shock into which 'the student' was thrown by my remarks made accurate reportage impossible. For the record - since so few students were present at the meeting - the statement which you found to be "an unexpected pleasure" was made after a student declared that MIT should be "a pleasurable learning experience." My comment was, "MIT is a professional and a pre-professional school - not just a learning experience." It was followed by another comment by me, "These are not mutually exclusive." (*Emphasis original - Editor.*)

My premise that MIT is a professional and pre-professional school is based on the fact that of the 8050 students, 3914 are graduate students, hopefully not here just for a pleasurable learning experience; of the 2879 undergraduates who have designated their course preference 1531 are in the schools of engineering and architecture - certainly to be considered professionally oriented where the attainment of expertise you deplore is of some significance. As a center for pre-professional training, we can point to the fact that 66 percent of all S.B. graduates in 1973-74 went on to graduate study in medicine, law etc., the larger fraction of these from the School of Science. If there is still any doubt about the professional and pre-professional character of MIT I would refer you to the Report of the Career Planning and Placement Office for the year 1973-74. What I would like to emphasize is that even though we are professionally and pre-professionally oriented we are an educational institution polarized around science where young minds can none the less come in contact with "older, wiser minds" for "learning experiences" that may even be enjoyable, and because of our nature, all the more rewarding.

Bernard S. Gould
Professor of Biochemistry

Iran statement

To the Editor:

The deal with Iran reported [March 4] is the latest example of MIT's willingness to put money and State Department connections over the slightest trace of moral responsibility. Given the facts already reported, given the clandestine nature of the deal, given the past history

of MIT, and given MIT's clear and undenied motives in this action, we must resist. Willingness to pass this issue by is to assent to the statement that peace can be given a price tag.

As well as the political issue, we feel that the questions raised here force those of us wishing to call ourselves members of the scientific community and humankind to assume the too-often-denied duty as creators and bearers of knowledge to insure its wise use in a disintegrating world.

Literature is being distributed concerning the deal and the questions it raises. We would hope that MIT, having nothing to hide as it claims, would provide an open forum for discussion of the issue.

We must state emphatically that MIT does not have a free hand to use OUR knowledge in OUR world as IT chooses.

Bruce Ackerman '75
For the Social Action
Coordinating Committee

Aristotle

To the Editor:

I'm sorry that W.S. Mitchell (*The Tech* March 7) finds one live Watergate worth, as it were, 2000 Platos and Aristotles.

"Any sole ruler, who is not required to give an account of himself, who rules over subjects all equal or superior to himself and rules to suit his own interest and not theirs, can only be described as a tyrant and his rule a tyranny . . . Tyranny is thus a system which chooses bad men for its friends . . . Noone willingly submits to such a government, if he is a free man." The speaker is not the chairman of the Watergate Committee, but Aristotle himself. Or - as they say - prevention is better than cure?

Murray Biggs
Assistant Prof. of Humanities

Save Ergo

(A copy of this letter was sent to The Tech.)

Dear Dean Holden

This brief note is just to inform you that I have heard about the controversy over Ergo's office space. Please let me inform you that I find Ergo's publication a very refreshing one indeed. A sort of an oasis in an arid (sic) desert.

I look forward every week to receive Ergo's publication, as well as many of my friends. If Ergo were to stop its weekly

publication, you will be doing irreparable harm to the students and working people of the Greater Boston Area.

I can neither plead nor stress too strongly to you that Ergo must keep its already inadequate office space in order to keep those weekly publications coming.

I thank you for your time and for your honest appraisal of this letter.

Jose R. Budecjen
March 12, 1975

1970 view: eliminate the threat of grading

(Continued from page 4)

retained and extended to the sophomore and junior years also, in order to encourage exploratory learning without threat, for all students.

We recommend that the grade of F be eliminated and replaced by No Credit. Under this system, subjects failed would simply not appear on records or transcripts. The present character of the grade F is a seldom-used threat, falling mostly upon those who fail to drop a course in time. The F on permanent records further discourages students whose performance indicates their greater need for help. Under a no-credit system (P/No Credit or ABC/No Credit) the incentive to improve performance would be greater, since no F would remain to enshrine past failures. (Under the present system the F is replaced by a higher grade earned later, but still counts in the cumulative rating for the

subjects' credit and grades would remain as they are, and supplemental transcript pages would give the optional evaluation paragraphs.

V. Our last word

Many faculty members who have consulted with note the tendency of students to abuse any grading system. There are many such students, and no grading reform can eliminate their desire to gain unearned recognition, or to get by with minimal effort for credit received. We have no solution to this problem, but believe that frank discussions among students and faculty can do much to clarify perceptions of any system of grading and evaluation.

We note also the comments of many students on how grading systems and certain faculty have a tendency to abuse students. Again, no grading system can remove such tendencies from people, nor can certain student problems be eliminated through grading reform.

Our purpose has been to suggest ways in which students and faculty can again make learning the first goal of classes and courses, while retaining certification of measurable skills and achievements through grade-independent examinations. We have suggested pluralistic alternatives because our study has convinced us that a single grading system cannot be expected to meet the varying expectations and needs of MIT's diverse students and faculty. We hope that our contribution will be helpful as students and faculty attempt to resolve questions of values and process in grading systems.

* * *

Due to long delay in writing up this report (the original was lost with a stolen crate of papers in 1972), I may well have omitted statements and recommendations we intended to make. Particularly, I regret not having Lincoln Berland's original history of grading at MIT, and the statistics we compiled on the distribution of grades given at MIT 1967-69. The basics of our 1970 report are retained: the three functions of grades as evaluation, certification and threat/reward; the report's division into history, philosophy, and recommendations; and all recommendations in this report appeared in the 1970 version, which we did not submit due to demoralization and distraction into other matters.

Our committee may have set a record for late submission of a committee report here.

(Wells Eddleman '71 was Undergraduate Association President in 1970. He is now an education researcher at the University of Illinois.)

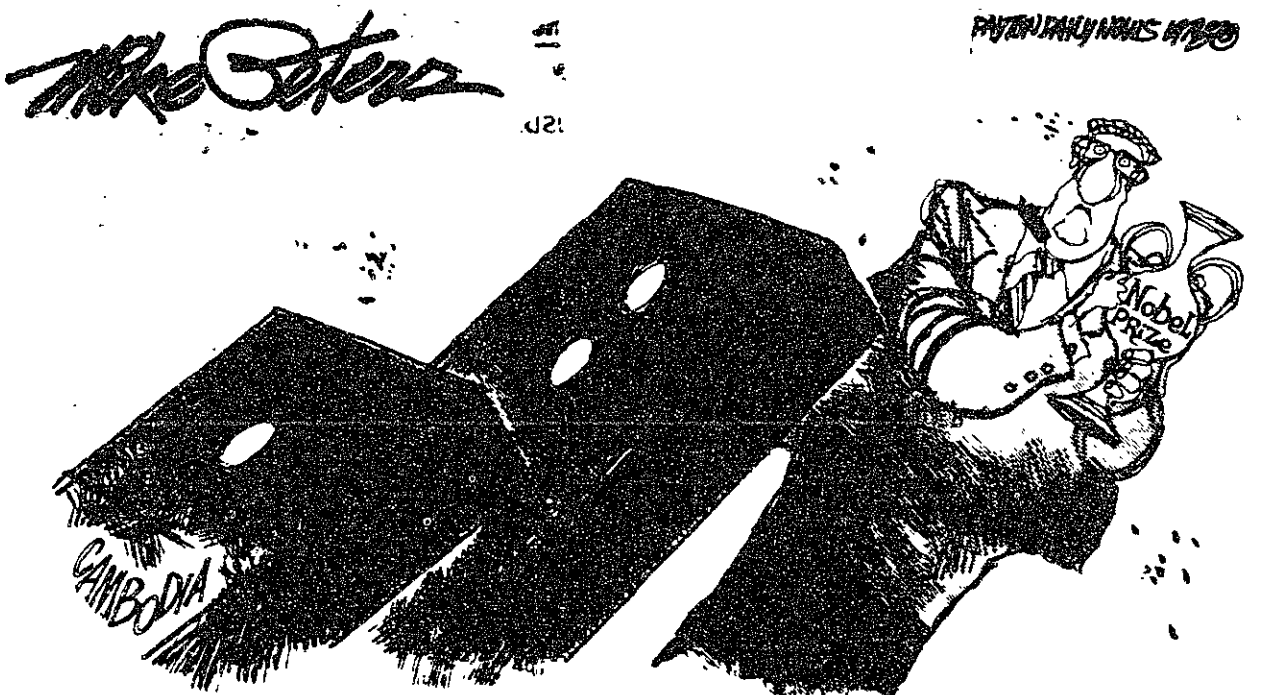


term in which the course was failed.)

We further believe credit in a subject should be based on a student's best performance in a subject, and subjects not failed should also be available for re-taking at the student's option, with the higher grade earned to be reported on any external transcript. This provision for re-taking subjects might help pre-med and other students who take some required subject before they are able to give their best performances.

We recommend that the grade D be eliminated. Presently so few D's are given that the grade is nearly meaningless, as C's are often given in some courses for borderline work. A, B, and C are the only letter grades much in use at present. Many universities (in 1969) had gone to an ABC/F or ABC/No Credit system, for example, Stanford. We see no reason for MIT to retain the grade D except for punitive purposes, which are on a highly subjective basis.

Finally, despite the problem of extra work for faculty and students, we believe an optional short paragraph evaluation of student's work should be appended, at the student's option, to the grade for any subject. Such evaluation would be labeled as written by student, faculty member or both, and faculty would have the right to read and file their own comments upon student-only evaluations. The faculty comments would also be part of any transcript issued. Probably transcripts of



Wentworth to plan Iran school

(Continued from page 1)
 role, and we agreed to do that." The discussions of the Wentworth program were concurrent with two other MIT discussions with the Iranian government, dealing with a program to train Iranian nuclear engineers at MIT and a possible advisory program for MIT faculty at Aryamehr University in Tehran, the Iranian capital. MIT and the Iranian government have reached agreement on the first program, which will begin in June; the second program is "dormant," according to MIT officials.

MIT has been dealing with Iran on a number of fronts for more than a year now. Several MIT faculty are involved in exchange programs with Aryamehr, Iran's leading technical university, and at least three Aryamehr faculty are currently visiting MIT.

Recognized leader

Wentworth was described by MIT officials as a "recognized leader nationwide" in post-secondary vocational engineering education. Founded in 1904 with a bequest from Boston businessman Arioch Wentworth, the school has a very good repu-

tation for training technologists, according to the officials.

Six Iranians will begin training at Wentworth in June, to provide the core of the faculty for the new school. Eventually, about 40 Iranians will be trained

for faculty positions at the Shiraz school, which will enroll 1000 students in 1980. Wentworth will also provide on-scene advisors for the new school in Iran for the duration of the program.



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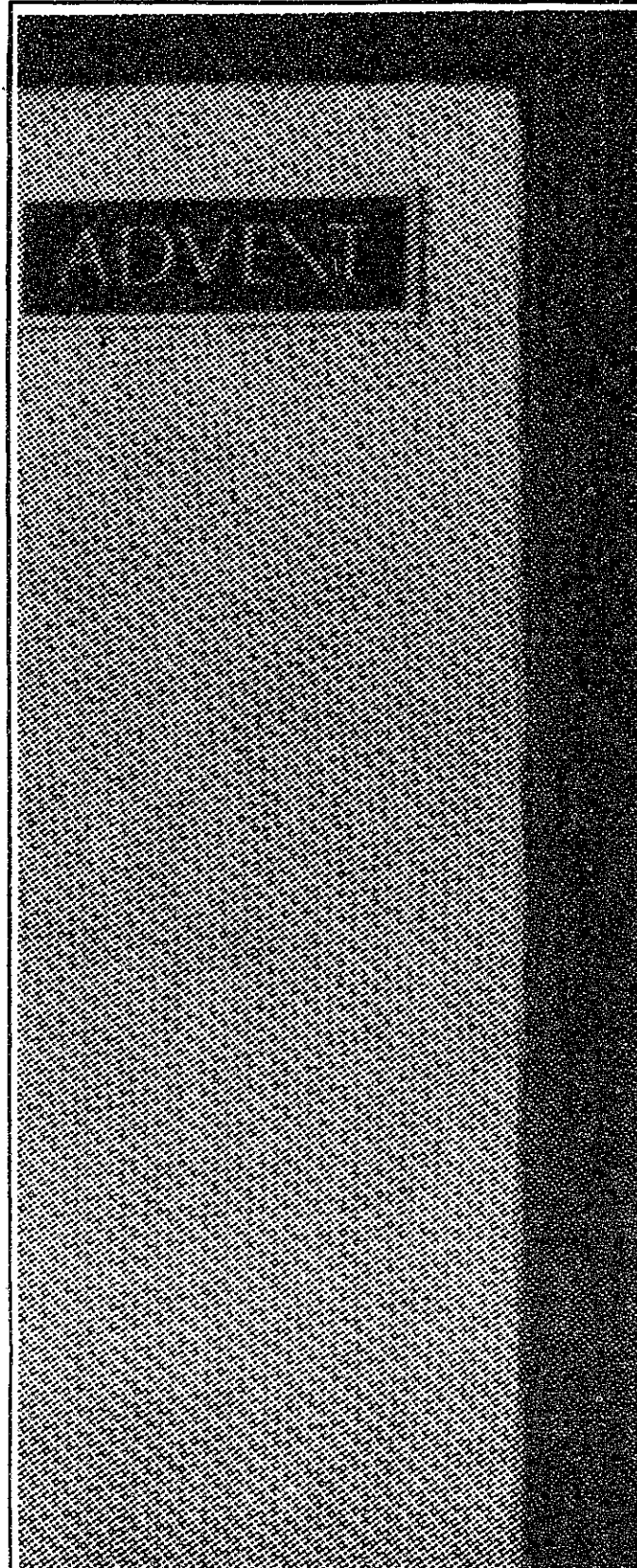
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Sports

Spring sports preview

Light crew 'one of best in country'

By David I. Katz
Lightweight

In what was going to be a rebuilding year, the MIT Lightweight crew will be one of the best in the country, according to coach Bill Miller. The Engineers' returning lettermen, seniors Henry Heck, Bernie Brooks, and Coxswain Mitch Green, will be joined by Joel Goodrich '75, and Dave Bufford '75, from last year's JV. Helping to fill out the squad are two former heavyweights Jeff Clarke '76, and Bill Sweet '77.

Coach Miller stressed the fact that any eight men he puts together as a crew will have to be under the lightweight limit of 155 lbs. Lighter oarsmen who have a chance to do well are Chris Dippel '75, Mike Neff '76, and Mike Paluszek '76. Miller's immediate plans are to boat a heavy varsity and see if they can lose enough weight to get under the limit.

The competition for this year is very similar to last year's. Harvard will be very hard to beat, while Rutgers, Penn, and Cornell promise to give the Engineer lights a good race.

The lightweights' season opens this year on April 12

against Yale at New Haven. The only home regatta will be on April 19 against Harvard and Dartmouth.

Heavyweights

This year's heavyweight crew schedule is one of the longest in MIT history. The addition of Yale in a dual meet and in the Packard Cup regatta (MIT, Dartmouth, Syracuse), and BU's re-entry into the annual race with Northeastern account for this increase.

Competition for a seat in the varsity will be very strong this year. Returning lettermen Jim Gorman '75, Gary Piantedosi '76, John Everett '76, Peter Beaman '76, and Mike Newman '76, will face stiff challenges from five returning members of last year's JV. Even Newman, last year's varsity coxswain, will have to earn his spot in the varsity as Tony Foti, '76, and Tom Strat '77, are trying for his seat.

In addition to the returning JV's, sophomores Will Sawyer, Joe Healy, and Tom Kush are pulling hard to get into the varsity on their first try. Tom Crawford '76, who just started rowing on the Florida trip last January, is a "welcome addition

the squad" according to Coach Peter Holland. Rusty Saunders '76, a former lightweight, is a good port-side oarsman who should do well with his new squad.

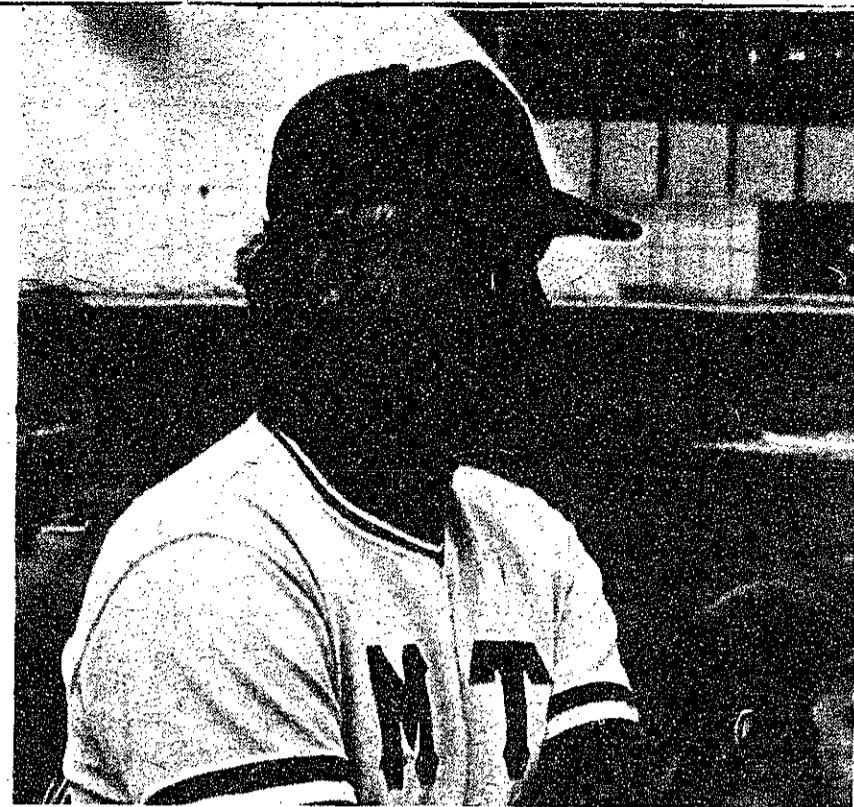
The heavyweights' competition seems the same as last year. The two strongest opponents, Wisconsin and Harvard, have five and six returning varsity oarsmen, respectively. Both Coast Guard and Northeastern claim to have improved since last year and will try to avenge their losses of last year.

Rebuilt Beavers start season today

By Jimmy Thompson

MIT's baseball team, an NCAA tournament representative last year, opens its 1975 season in Florida today with a game against FIT. The team then plays one game each day for a week, finishing with Eckerd on Thursday and Armstrong State on Friday. Both of these teams were in the NCAA regionals last year, Eckerd losing in the finals.

The seven-game road trip in Florida should be a good test for



MIT varsity baseball coach Fran O'Brien, who guided the Beavers to their first NCAA tournament berth last year, begins his seventh season today when MIT faces FIT in Melbourne, Florida this afternoon.

the Beavers, as the baseball teams there are already midway through their schedule.

Coach Francis O'Brien has held practice for fifteen straight days to get the team into some kind of shape; while the players' physical condition is not yet at a peak, co-captain Dave Yauch '75 feels that his teammates are "psyched" to win.

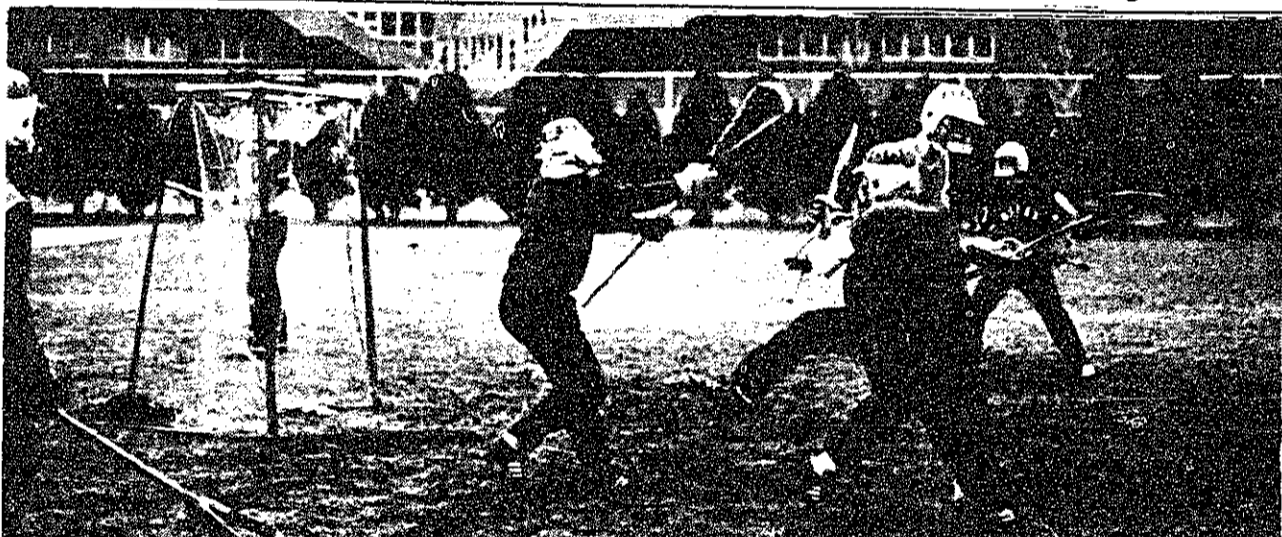
Coach O'Brien has done a fair amount of rebuilding this past fall, having lost four starters from last year's team, two of them Greater Boston League All-Stars, but he feels that the present team has a good nucleus of players. Co-captain Yauch agrees that the squad experienced a "loss of talent and leadership" but thinks there is a definite chance of improvement on last year's record.

Coach Fran O'Brien plans to again stress team speed, aggressive baserunning, and a bunting-hit and run offense that he so successfully employed last year in coaching the squad to its first NCAA Regional tourna-

ment. This year's team is comparable in strength, to some extent, to last year's record-breaking squad. While not as strong in the hitting department as last year, this year's squad has a lot more depth and strength in the pitching department, with Yauch, Rich Olson '78, John Cavolowsky '76, and Mike Royal '76 looming as starters.

The Beavers should get strong hitting support from Dan Sundbert '77, Jeff Felton '78, Vince Maconi '76 and co-captain Herb Kummer '75. Sundberg has matured as the club's long ball hitter while Kummer, a starter for four years at first, is expected to anchor the MIT infield this season.

Defensively, the infield and pitching staff are looking good, with the only uncertainty being the outfield, which O'Brien will have set by the time the Beavers return from Florida on Sunday, March 30. They host perennial GBL power, Boston College, on Tuesday, April 1 at Briggs Field.



After six weeks of practice in the New England snow and cold (one such session this week shown above), MIT's varsity lacrosse team travels to Florida today for one week of practices and games against local teams, in an attempt to prepare the Engineers for their 12-game New England schedule that begins at home Sunday afternoon, March 30 against Rochester.

W crew: schedule tough, hopes high

By Renan Beckman

(Renan Beckman is a member of the MIT Women's Crew.)

With its opening race of the season just two weeks away and a full seven months of training behind them, the MIT Women's Crew is eager to prove itself.

There are about twenty team members, and Coach John Miller's (MIT '74) job over spring vacation, when there will be two practices each day, will be to put together the two "winningest" boats possible. About half the team consists of returning oarswomen, including captain Ingrid Klass '76. The other half who joined the ranks in September have already had racing experience in the 3 mile-long Head

of the Charles Regatta last fall and have now reached a level of endurance and finesse that make them invaluable to a winning team.

The spring schedule includes competition against the best women's rowing colleges in the country: Radcliffe (National Champions), Yale, Princeton, BU, Dartmouth, UMass, Williams, URI, and WPI. Unlike the other MIT crews, who have the luxury of a relatively easy first race of the season, the women will be facing Yale and Princeton, 2nd and 3rd respectively in the 1974 Eastern Division Sprints. The Eisenberg Cup, donated by Dean Carola Eisenberg and Dr. Eisenberg

(Harvard Medical School), will be given to the winner.

There has been growing support recently for women's athletics at MIT, and the Women's Crew has had its share of the backing. A long-awaited locker room at the Pierce Boathouse will be ready within a few weeks, and a new fiberglass racing shell, funds for which were donated by Mary Hemenway Homans, grandmother of team member Roseanna Means '76, has been ordered. However, "They don't make fast chariots, just fast horses," and the crew members, keeping this in mind, are working harder than ever and looking forward to a successful season.



The MIT Rugby Football Club, shown here in action against UMass last fall, begins its defense of the New England Rugby Union championship next Saturday, March 29 at Briggs Field against the Harvard Business School RFC.

IM Bowling Standings

A-league (W8)			B-league (W6)		
IMOF	10	2	ZBT III	11	1
Metallurgy	9	3	Baker 'B2'	9½	2½
Kappa Sigma 'A'	7	5	McCormick 'B'	7	5
BTP 'A'	5	7	2nd West II	5	7
Baker 'A'	5	7	PBE 6	4½	7½
ZBT I	3	9	2nd West I	4	8
Epsilon Theta 'A'	3	9	Smokers	4	8
			Theta Xi 'D'	3	9
A-league (T8)			B-league (W10)		
BSU	11	1	3EMass Mark & MP	9	3
Lambda Chi Alpha	8	4	Nuclear Eng	8	4
Sloan Masters	8	4	PLP 'C'	7	5
PLP 'A'	6	6	Brand X	7	5
PLP 'B'	6	6	Astros	5	7
Turkeys X	5	7	Delta Tau Delta	4	8
Alpha Tau Omega	3	9	Burt 5 Smok III	4	8
Theta Chi	1	11	H Turkeys 21	4	8
B-league (T6)			B-league (R4)		
1st West	11½	3½	NRSA 'A1'	8	4
Kappa Sigma 'C'	9	6	Fiji All-Stars	7	5
Earth & Planetary	8	7	Phi Delta Theta	7	5
Theta Xi 'B'	8	7	Griches	7	5
2E 'A'	6	9	PBE 2	6	6
Kappa Sigma 'G'	6	9	Baker 'B4'	6	6
Burton 5 Smok IV	6	9	Baker 'B5'	4	8
MacGregor 'AA'	5½	9½	Fast 'n' Bulbous	3	9
B-league (T10)			B-league (R6)		
2E 'B'	9	3	Kappa Sigma 'E'	11	1
H Turkeys 'B1'	8	4	Phi Beta Epsilon 5	7	5
Burton 4	7	5	MacG Turk 'B2'	6½	5½
Burton 5 Smok VII	6	6	Baker 'B1'	6	6
Kappa Sigma 'F'	6	6	Bur 5 Smok I-Al Sux	5½	6½
Baker 'B3'	4	8	ZBT IV	5	7
Poten Kaput Sharp	4	8	Theta Xi 'C'	5	7
Epsilon Theta	4	8	McCormick 'A'	2	10
B-league (W4)			B-league (T8)		
Burt 5 Smo II	12	0	Theta Xi 'A'	10	2
Theta Delta Chi	9	3	Sigma Phi Epsilon	8	4
ZBT V	7	5	Delta Kappa Epsilon	8	4
ZBT II	6	6	BTP 'B'	6	6
Baker 'B6'	6	6	Beethoven's Three	5	7
NRSA 'A2'	6/		Pin Knock Spast	4	8
Baker 'B7'	1	11	SAE '2'	4	8
Conner 3 Balloon	1	11	Phi Beta Epsilon 4	3	9