Departments to administer Phase II

By Sophie S. Wang

The responsibility for Phase II of the Institute Writing Requirement has been transferred to department coordinators without much difficulty, according to Les Perelman, coordinator of the writing requirement.

Perelman also said that the deadlines for completing the Phase II requirement would be more strictly enforced than in past years, and that the number of cooperative subjects have been expanded.

With Perelman's replacing Bonnie J. Watkins as coordinator of the writing requirement last year came an important change in structure of the program. This revision, which was adopted by the faculty on April 20, shifted the responsibility for overseeing the Phase II requirement from the Writing Requirement Office to the individual departments.

The Phase II requirement is meant to encourage upperclass students with specific writing that they will do in their careers. Perelman said, "in the specialized discourse of their professional studies." In past years, papers coming in to satisfy the requirement have always been overseen by the Committee on the Writing Requirement, which then hired readers to evaluate the papers. Those readers were usually people finishing their PhDs in the field in which the paper was written, teachers, or other people qualified in the field.

However, the committee decided that the best teachers and judges of written discourse in a particular discipline were the practitioners of that discipline. Perelman said. Each department is now able to set its own guidelines for Phase II, including the evaluation and report back to the committee, which now serves as a central base for the entire system. These coordinators are chosen by individual departments.

Professors Steven L. Kleinman '70 and William M. Bennett '52 chair the committee. (Please turn to page 20)

Freshmen encouraged to formulate IAP plans

By Tristan Lee

Both this year's Freshman Handbook and an "Independents Activities Period Preview" distributed by the IAP Policy Committee state that freshmen are expected to plan their IAP schedules with their academic advisors. But IAP Policy Committee Chairman James W. Mac '41 said the committee is simply encouraging advisors to discuss IAP with their students.

"IAP will still be optional," Mac said. "The only drastic changes will be in the area of making the three-and-a-half week term more appealing to everyone from undergraduates to faculty."

The suggestion that students formally plan their IAP was made by the IAP Policy Committee last spring. At that time, the committee also recommended that MIT take steps to increase faculty participation in IAP and that IAP纒ues be offered during the January intercession.

The report followed the release of a controversial Undergraduate Academic Support Office study last fall that concluded that more than 60 percent of freshmen, sophomores, and juniors spent their time during IAP "nonproductively." "We are just starting to collect all the information from last year's IAP committee," Mac said. "It will take us a while to take a look at all of the notes and conversations." The committee's immediate goal is to try and recruit more undergraduates (especially freshmen) and faculty to participate in IAP. Academic advisors are supposed to encourage more student involvement, and the new "IAP Preview" is intended to give an "early, enticing glimpse" of the period.

The committee also believed it was especially important to get freshmen interested in IAP, as they are the ones normally enrolled in Phase II. The committee said it was important to get freshmen interested in IAP, as they are new to the program and do not know what it is about. About. The Freshman Handbook called IAP "an integral part of the curriculum. (Please turn to page 12)
New IFC alcohol policy swells Judcomm duties

(Continued from page 1)

appeal the decision without specifying any grounds. If the remaining three members of the committee uphold the verdict, the house may again appeal — this time to the full IFC. Each living group may then cast a vote to make the verdict final.

Judcomm is still formulating its approach to the new policy, Walker said. For instance, although the committee has the authority to make spot checks of parties to ensure compliance, Walker said official Judcomm representatives would not be sent to parties unless the committee had heard of repeated or systemic violations by a particular living group.

One hearing completed

The Judicial Committee held hearings last Wednesday in which three violations were tried, and has scheduled two more nights of hearings before Walker's resignation takes effect. There are nine alleged violations to try on those two nights, four of them rush violations. The other five are violations of the alcohol policy.

Walker said the remaining alcohol violations were all violations of the poster policy, which prohibits any mention or depiction of alcohol on a party poster. These violations carry a fine of $50 to $100 each.

The committee is trying to "increase the awareness of the IFC" regarding the importance of the alcohol policy, Walker said. By punishing every infraction, even relatively minor poster violations, the Judicial Committee can deter houses from violating any portion of the policy, he continued.

Neal Dorow, advisor to fraternities and independent living groups, has expressed interest in reviewing the judicial process, Walker said. Dorow concurred, pointing out that the viability of the IFC depends on its ability to make its own guidelines and enforce them.

Dorow would like Judcomm to establish "a clear sense of purpose" regarding its mission. After talking with several of the IFC officers, he has concluded that there is a need for improvement in the procedures and enforcement guidelines Judcomm uses. He declined to be too specific on what changes he thought would be necessary, saying that it would be important for IFC members to develop a system "that works for them."

There is some discontent about the strict enforcement of the new alcohol policy, Dorow said, although he thinks it is largely confined to the "rank and file" membership of the IFC. "Most of the presidents, social chairmen, and treasurers understand the need for this policy," he continued.

Beta Theta Phi punished

Judcomm found Beta Theta Phi guilty of several violations of the new alcohol policy at a hearing last Wednesday, sources told The Tech. Other charges also brought against the fraternity were dropped.

Dorow said he thought the violations were probably the result of a "lack of understanding" of the new guidelines on the part of the fraternity.

The complaint was brought against the fraternity by a Judcomm representative present at a house party in his official capacity. The party was held while rush guidelines were still in effect, according to Walker.

Members were allegedly drinking in a common area during the party, Dorow said, but Judcomm was not able to prove that the bartenders had served underage drinkers. He declined to be more specific about the other charges.

Beta Theta Phi must pay a $500 fine for the unspecified violations. Walker did not know if the fraternity would appeal the ruling.

Mike Casagrande '99, president of BTP, declined to comment on the substance of the hearing.

The same night, Judcomm tried two other identified houses for rush violations. The charge against one of the houses, a violation of dry rush rules, was dismissed. The other house was fined $75 for two "automatic" infractions during rush. Violations such as a display of insignia prior to the beginning of rush, or failure to turn in door records to the IFC after rush are considered "automatic" infractions.

Judcomm can levy sanctions ranging from a private reprimand to a $500 fine per violation. The committee may also make a recommendation to the Community Relations Committee for mandatory community service. Judcomm occasionally publicizes the details of a hearing, although it is considered a severe sanction and is rarely done, Walker said.

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We'll be here

October 17, 1988
American officials are anxious to talk with Singh to see if he and would be turned over to the American ambassadors in Lebanon. But it is not clear yet whether any other hostages are going to be freed by their pro-Iranian captors.

The hostage released yesterday to Syrian custody was Steen, about to be released. He was one of three hostages in Lebanon. The paper's story that the United States is talking with the Syrians to prevent any attacks. It was the first summer Olympics end.

scheduled for tomorrow is the one and only debate. The commission, which was formed by the two national parties, sponsored the first debate. The League of Women Voters is withdrawing its sponsorship of the presidential debate later this month in Los Angeles.

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American astronauts are back in space again. Like many others, I experienced a sense of relief and station after those infamous words that marked the doom of Challenger, “Go at throttle up,” were spoken, and Discovery kept going strong. It has been a long time, too long, since Americans have been in orbit. But NASA must be certain not to forget the lessons that Challenger taught. As a result of the Challenger a close look at America’s space program was taken. The results of this examination were changes in space policy, law, and management.

Of the changes that were made the most important is that NASA no longer has a government-fueled monopoly on space launch services in the United States, and in fact NASA will no longer launch commercial satellites of any kind. This has finally opened the way for commercial launch services. It is amazing that the largest free market country in the world did not see the need or the value of space commercialization until after such a catastrophe. And even now the drive for commercialization comes from a desire to alleviate the pressure on the shuttle rather than from the merits of commercialization itself.

NASA should act in the business of doing mundane things, and launching of commercial satellites has certainly become commonplace. Rather, NASA should be pushing back the frontiers of space, doing risky things that have never been done before, and show no immediate possibility of profit. If someone can make money by performing a service in space there is no reason why NASA should be involved in such an area. The free market is a powerful tool that can be used to help maintain America’s prominence in space.

NASA’s primary, although an exclusive, launch vehicle. However, many years in the future shuttle flights will become safer, more common, and even profitable, just as the launching of expendable vehicles has become. At that time it will be appropriate for private industry to begin to take over the shuttle industry, and for NASA to move on and continue to push back the frontiers of space.

Yours from now historians will look back at the Challenger as a critical turning point in the American space program. Either the United States succeeds in the point at which America lost its roll as a leader in space, or it will be the start of an open space policy geared toward commercialization that allowed the United States to once again lead the way in space. The choice is ours.
Space exploration is worth the risks

To the Editor:

I have actually finally sat down to write a letter to the editor of The Tech. There are a lot of issues on and off campus that I could write about: the Presidential election, pornography and sexual harassment, problems and changes in MIT education, the Student Conference on Sexual Activity on campus, the environment. Indeed, I have been tempted frequently to write a letter to the editor on various issues like these in the last few weeks. I usually have run out of enthusiasm to write it before I got around to it. But now I've got something to write about: our new telephone system.

I am so happy that I actually was tempted to stand up in Walker dining hall and announce it. I am writing this letter only half an hour after I saw it. Discovery was launched! After a time of confusion and second-guessing, we are once again in space! This has got to be one of the most important moments in recent years. I think everyone should be as excited as I am. But the dozens of people watching the launch in Lobby 10 seemed to be afraid to cheer or clap until well after the solid booster separation.

The telephones have been removed, the displays provided in our new telephones. All of these new displays on our telephones. The displays are not professionals, but students while you earn $6.25/hr plus free meals for every 5 hours worked. There is lots of hours available, and no experience is necessary. Stop by Walker dining hall and talk to a student captain for more details, or call x3-2714 (Walker).

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IMMEDIATE NEED for computer-oriented translators from Japanese into English!

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The nightline was conceived as a confidential hotline available for any member of the MIT community. Anonymity was afforded by the telephone system, which had no easy way for determining where a call originated. Now, there is a new telephone system. It's called the SESS, and it provides members of the MIT community with benefits and features for the MIT community. It now becomes possible for any digital phone to display the telephone number of the calling party. This display of the originating telephone number destroys the caller's anonymity.

Because anonymity is such an integral part of our operations, we have decided to remove the display feature for all of the displays provided in our new telephones. The displays will not be reinstated in the future. We wish to inform the MIT community about our action and its implications for the future. As with the old telephone system, all callers of Nightline will be completely anonymous.

Anything you want to talk about with us will be held in the strictest confidence. As before, we will be open from 7 pm through 7 am, seven days a week. There will always be two staffers on duty, a male and a female. We are not professionals, but students just like you. We are here to listen, anonymously. We hope any confusions which might arise out of the new telephone system is cleared up by this article. If you have any questions or concerns, feel free to call Nightline at either 253-7840 or our new number 253-8800. We're here to listen. Thank you.

Steve McDonald '84

Nightline's privacy won't be hurt by new phones

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Opinion feedback

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Student activities, administrative offices, academic departments and other groups -- both on and off the MIT campus -- can list meetings, activities, and other announcements in **The Tech’s “Notices” section**. Send items of interest (typed and double spaced) via Institute mail to “News Notes, The Tech, PO Box 29, MIT Branch, Cambridge, MA 02139.” Noises run on a space-available basis only; priority is given to official Institute announcements and MIT student activities. The Tech reserves the right to edit all listings, and makes no endorsement of groups or activities listed.

**Announcements**

Cameron Publishing Company announces a new poetry contest open to all. There is a $100 first prize plus other prizes. For contest rules, send an SASE to Cameron Publishing Company, 1109 S. Plaza Way #422, Flagstaff, AZ, 86001. The deadline for entry is November 10, 1988.

Howard Hughes Medical Institute is accepting applications for its 1989-1990 Fellowship in Biological Sciences. The application deadline is November 14, 1988. For more information or applications, call (202) 334-2871 or write to Hughes Doctoral Fellowships, The Fellowship Office, National Research Council, 210 Constitution Avenue, NW, Washington, DC 20230.

The Newton Free Library will have paintings by Thomas Bar- ron, Fay Grajower, and Arthur Yanoff from October 4-30. The library is located at 414 Centre Street, Newton Center. For more information, call (617) 523-7145.

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**Notices**

**Lesbian? Bisexual? Confused?**

**Come to the WOMEN’S ISSUES Discussion Group**

On Wednesday, October 5, 1988 7pm - 11pm in Room 50-306 (Walker Memorial) Complimentary Referrals. Feel free to drop by. Sponsored by GAMIT.

For more information call 621-1744 or 253-5440.

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**Classified Advertising** in The Tech $5.20 per word for each insertion, minimum 35 words or less. Must be prepaid with check or money order. No cash accepted. Phone number: The Tech, W20-453, or 253-7000, M.I.T. Branch, Cambridge, MA 02139.

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Then You Think, But It's Lower Price Has Its Price
The Beth Israel Hospital hosts a Rape Crisis Group on Tuesdays at 7:30 am for women who are experiencing disruption in their lives immediately following or up to six months after being raped. The long-term crisis group meets Thursdays at 6 pm. For more information, call (617) 735-6738.

The Epilepsy Association of Greater Boston's School Alert Program is looking for individuals who have epilepsy or their family members to talk with fourth grade students and school personnel in their local community about epilepsy. For more information, please contact Gayle Dayley, School Alert Coordinator, Epilepsy Association of Greater Boston at 542-2292.

For students searching for ways to stretch the shrinking dollar abroad, the Council on International Educational Exchange announces the 1988 Student Travel Catalog. The Catalog is one of the most comprehensive, FREE budget travel guides available. It may be obtained from CHE, Dept. STC 161 East 42nd Street, New York, NY 10017. (212) 661-1414 or 312 Sutter Street, San Francisco, CA 94108, (415) 421-3473. Enclose $1 for postage and handling.

The National Consortium for Graduate Degrees for Minorities in Engineering, Inc., (GEM) is accepting applications for its 1989 Fellowship competition which will provide 350 awards to minority students in engineering. Applications must be received by December 1, 1988. For more information or for application materials, please write to GEM, P.O. Box 357, Nore Dame, IN, 46556.

The University of Massachusetts Medical Center has begun a new program to bring undergraduates into its laboratories. Fellowships are available for 5-10 month intervals. Deadline for application to the Spring-Summer 1989 program is November 15, 1988. More information and applications are available from the Office of Graduate Studies, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA, 01655.

In an effort to inform students of their rights, the Office of Consumer Affairs and Business Regulation has prepared a pamphlet that summarizes your consumer rights. This is called "College Consumers." Copies of the college consumer guide should be available in the bookstore or the student center. If you can't find a copy, write the Office of Consumer Affairs and Business, One Ashburton Place, Boston, MA, 02108 or call (617) 727-7755.

Every Tuesday and Thursday from 11 to 3 pm surplus equipment is sold at the Equipment Exchange by departments in the institute for the purpose of making it available to any department, student, or student by transfer. No funds needed. Thirty days after being advertised in Tech Talk the equipment is sold. NW30.

Are you concerned about your cholesterol level? If you have been told by your physician that your cholesterol level is mildly or moderately elevated, you may be eligible to participate in a study at Beth Israel Hospital that will determine the effectiveness of a new anti-cholesterol drug. For more information, call 735-6387.

The Beth Framingham Area Vets' Outreach Center is now announcing the start of the new Rep sessions for Vietnam Veterans. These sessions will be held every Wednesday (except the third week of the month, when they will be held Thursday) at 7 pm. There is also a group for the wives of Vietnam Veterans. For more information, call 876-8888.

Would you like to give Relief Aid to hurricane victims in Jamaica? Contact John-Paul (x-9518), Michael (x-9515) or Wayne (x-9256) for more information and drop-off points.

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As soon as I finished Advanced Training, the Guard gave me a cash bonus of $2,000. I’m also getting another $5,000 for tuition and books, thanks to the New GI Bill. Not to mention my monthly Army Guard paychecks. They’ll add up to more than $11,000 over the six years I’m in the Guard.

And if I take out a college loan, the Guard will help me pay it back — up to $1,500 a year, plus interest. It all adds up to $18,000—or more—for college for just a little of my time. And that’s a heck of a better deal than any car wash will give you.

THE GUARD CAN HELP PUT YOU THROUGH COLLEGE, TOO. SEE YOUR LOCAL RECRUITER FOR DETAILS. CALL TOLL-FREE 800-638-7600* OR MAIL THIS COUPON.

Imagine the Blue Angels in the photograph at right. Now imagine experiencing them in full-color, projected on a huge, curved screen that is 76 feet in diameter and fills both the viewer's horizontal and vertical peripheral vision. The Omnimax film "Speed," which opens today at the Museum of Science, does just that and is certainly the best and most entertaining way to make your stomach queasy short of boarding a speeding race car or a roaring jet airplane.

On the surface "Speed" is a simple account of the steps in man's ever-increasing rise in rapidity: from the bicycle to the car to the sound barrier to space and beyond. Greg MacGillivray's film could easily have fallen into a number of traps, but it didn't. The film might have been a dry documentary overlaid on spectacle on the huge Omnimax screen. MacGillivray might have fallen into the cliches of this genre of film, quickly boring the audience with repetitive, stomach-churning extravaganza.

But what raises "Speed" above the stereotype is MacGillivray's ability to evoke several emotions in exploring the scope of his subject matter: the humor as the audience watches a young Billy Vukovich, future Indianapolis 500 champion, hot-rod out of the reach of the police along the back roads of Fresno, California; the nostalgia as stock newsreel chronicles the quest to break the sound barrier; the majestic brilliance of jet powered drag racing. While the 33-minute film is too short to amount to more than a mere overview of man's progress in precipitousness, MacGillivray does manage to instill the wonder and excitement. "Speed" still contains some of the clichés — a ride on a rollercoaster, panoramic views from a sailplane — but MacGillivray manages to subdue the overemphasis on Omnimax, all-around-screen spectacle and instead concentrate on employing the effect to more subtle use, for example in changing the point of interest on the immense screen. The film's only failing is in its final segment where MacGillivray attempts to present a simulation of speed-of-light travel. This sequence has no basis in reality and too abruptly shifts the film from down-to-earth tangible to speculative and uninteresting camera tricks. The sequence shows some promise in that it is the first attempt at special effects on the Omnimax screen (where the tolerance limits are far stricter than either 35 mm or 70 mm film because of the expansive projection size) but nevertheless hardly seems appropriate to Speed.

"New England Time Capsule" is also presented in conjunction with "Speed" and is a nice, 5-minute introduction to New England for those from out of town. "Time Capsule" relies more heavily on spectacle than does "Speed" but this seems more appropriate in a brief view of the panorama of New England.

Get A's and B's for and a CD f
Try a Macintosh today - you
Now that a new school year is under way, we have an idea that will make both you and your parents feel a bit more confident come finals time.
Get a Macintosh computer to help with your homework.
Then you'll never have to spend another all-nighter retying a paper just to purge a few typos and dangling modifiers. You'll be able to crank out assignments that look as though you bribed a friend in art school. And with an amazing new program called HyperCard— which just happens to come packaged with every Macintosh— you can easily store, organize, and cross-reference research notes to your heart's content.
And if that isn't enough reason
'89 IAP Guide Preview

M.I.T. INDEPENDENT ACTIVITIES PERIOD

What's IAP?
The Independent Activities Period (January 11 - February 1, 1989) is both a break from the rigors of MIT's regular academic semesters and an opportunity to explore alternative kinds of learning, pursue independent projects (including recreational ones), and, in general, write your own ticket for a combination of experiences that will enrich your education.

What's this Preview for?
It's meant to give you an early, enticing glimpse of some of the activities that will be offered in IAP '89. The Preview offers only a small sampling of what will be available during IAP. You'll receive a full account of all 600+ scheduled activities in the IAP '89 Guide, which comes out in early December. What we want you to know about now is a number of relatively large-scale activities -- lectures and film series, intensively conducted mini-subjects, labs, etc. -- which will meet at least three times. Some of them carry academic credit or the option of credit. Many don't. The idea is to let you begin planning now for next January, with some sense of the larger horizon. One of these activities (or a combination of two or three) may become the center of your total IAP program.

Freshmen! Freshwomen!
Take a good look at what's available at MIT before you make travel or employment plans for the period from Christmas vacation through February 1. You'll soon be meeting with your advisor to work out a tentative IAP plan. Use this Preview. Talk with faculty and upperclassmen. Drop by the IAP Office, 7-163, to ask questions and look over copies of the IAP Guide from previous years. Plan for IAP now.

Freedom
Remember: What you do during IAP is up to you. (That's why it's called 'independent.') Maybe you'll study. Maybe you'll ski or skate. Maybe work, travel, talk, sleep. Even read! There's no prescribed set of expectations you're supposed to meet, except to make IAP worthwhile for you, in your own way. But do try to consider the full range of options open to you.

If you find something in the Preview that appeals to you...
In most cases, just take note of it and wait for the December Guide to give you details on how to sign up. A few of the activities presented here list a contact person for immediate sign-up.

For policies regarding credit, tuition, room and board, veterans' benefits, special students, and student exchanges, consult page 49 of the MIT Bulletin.

If you want something that's not in the Preview...
If you have an idea for an independent study or research project, contact a faculty member in the field. If you'd like to organize your own activity, let the IAP Office know about it. 7-163, x-1668. We'll tell you how to go about doing that or you can talk to the relevant IAP departmental coordinator. There's money available to help fund your activity. The deadline for funding and publicizing an activity in the IAP Guide is Thursday, November 1.
Aeronautics and Astronautics

History of the U.S. Space Program
Prof. Leon Trilling will lead this seminar examining the motivations and the history of the US Space program. Participants will look at the basic technologies and discuss the space program as a vehicle for scientific research and human adventure, and also as an instrument of cold (and hot) war and of economic and social innovation (especially in communications). This seminar will require a term paper and will offer six units of credit. The tentative schedule is two hours per day from January 17 to 27.

Introduction to Engineering Drafting
Students will become familiarized with the fundamentals of drafting for engineers with practical examples from the field of aerospace. They will be introduced to concepts of drafting, including 2-view, 3-view, isometrics, and perspective drawings. Techniques covered will include pencil, pen, and possibly computer drafting. Contact Prof. David Akin for more information.

Anthropology/Political Science

Change from Below in Central America
Rather than view events from the standpoint of national governments or international relations, we will discuss factors for change that come from popular organization within each country. Included among these are labor unions, community organizations, student and women's groups, and religious organizations. This approach will provide a deeper understanding of the sources of the present turmoil. It will also give a more realistic way of thinking about the future of the region. There will be two 90-minute sessions during the week of January 23.

Prof. Jonathan Fox and Martin Diskin, instructors.

Architecture

Internship Program
Work in an architect's office to gain experience, improve your skills, and see the inner workings of an architectural practice. You will earn six units of academic credit but no salary. Internship appointments will be made based on your skills and interest. This will be introductory and does not pay, but credit will be offered for six units of credit. The course will meet two hours per day for ten days. Limited enrollment. John Annese, instructor.

Lab in Protein Biochemistry (5.315)
Prof. Alexander Klibanov, John E. Messing, and Steve Tannenbaum will lead this course introducing undergraduates to modern experimental methods of protein chemistry. They intend to cover the fundamentals of experimentation in protein and enzyme biochemistry including the isolation, purification, and characterization of proteins. This course will supplement 5.100S/5.11L and is offered for six units of credit. It will meet all day on Tuesdays and Thursdays throughout IAP.

Review of Organic Chemistry I (5.12)
A review of 5.12 (Organic Chemistry I) for those who plan to take 5.13 this spring and who took 5.12 in the spring of 1988 (or earlier). Approximately four sessions will cover structural and stereochemistry, organic reactions and bases, displacement reactions and mechanisms, the chemistry of the carbonyl group. Prof. F. D. Greene, instructor.

Civil Engineering

Garage/Park at Post Office Square
If sufficient student interest exists, Prof. Robert Whitman will offer a "capping subject" about a development in Post Office Square in the heart of the financial district. The project is now occupied by a dilapidated two-story garage. This garage is to be removed, and a seven-level underground garage constructed with a public park at the surface. In the proposed capping subject, there would be an introductory lecture (one to two credits) to discuss the nature and scope of the overall project, and to describe several major underground parking projects in Boston. Teams of undergraduate and graduate students would then look at various aspects of the project and prepare papers on general topics such as the relative pros and cons of top-down vs. tied-back construction for the excavation, the feasibility of using prefabricated components as they impact on the construction of the underground parking. The students would also analyze specific technical questions such as the required lateral earth pressures, design of reinforcing steel for slurry wall, estimating quantity of water flowing into the excavation, and the number and location of access ramps into the garage. There will be a final oral presentation/defense of conclusions and an opportunity to compare proposals with actual solutions being adopted. The course will meet for one or two weeks during IAP. Academic credit to be arranged. If you are interested, contact Prof. Whitman, 1-342, x-7127.

Earth, Atmospheric and Planetary Sciences

Field Geology II (12.152)
Geological field studies in selected areas of California and Nevada to develop experience in recognition and mapping of metamorphic, igneous, and sedimentary rocks of structurally complex areas. Limited enrollment. Prerequisite: 12.151 or 12.001 in fall semester. Participants will pay approximately 810.00 to cover food and lodging. It will run from June 5 to 27. For more information, contact C. B. Bell, 6-3040, x-73919 or L. McKinnon, 54-1118, x-2819.

Astronomy Field Camp at Lowell Observatory
Undergraduates will learn how professional astronomers carry out their research at a major observatory by participating in a UROP-style research project under the supervision of a Lowell Observatory staff member. The program will take place for three weeks during IAP. The first two days will be devoted to meeting project advisors and learning about research facilities at the observatory. Prerequisite: 12.117 or equivalent. Sign up with Ginny Stagg, 54-426, x-6915. Prof. Jim El synopsis, and instructor.

Art

Art Classes
The Student Art Association will offer a wide range of classes in drawing, painting, crafts, mixed media, ceramics, photography, and printmaking. Most classes meet once a week. For more information, contact Ed McClure, WO0-425, x-7319.

Biology

Human Genetics
This six-unit subject at the advanced undergraduate level will meet three times per week during IAP. Taught by Prof. Nancy Hopkins and Dr. Richard Erbe of Massachusetts General Hospital. Other MIT faculty will lead the sessions. Check the Guide for details.

Chemical Engineering

Introduction to Computer Methods (10.001)
Introduction to the use of computers in chemical engineering and to the computer environment on Athena. Exposure to methods for text and picture creation, data manipulation, symbolic manipulation, and numerical programming. Elementary methods for numerical algebra and optimization are presented. Prof. R.C. Armstrong, instructor. Schedule to be arranged.

Chemistry

Basic Machine Shop
You will learn the skills needed to operate a lathe, drill press, miller, and other common machines encountered in a machine shop. This course will meet two hours per day for ten days. Limited enrollment. John Annese, instructor.

Lab in Protein Biochemistry (5.315)
Prof. Alexander Klibanov, John E. Messing, and Steve Tannenbaum will lead this course introducing undergraduates to modern experimental methods of protein chemistry. They intend to cover the fundamentals of experimentation in protein and enzyme biochemistry including the isolation, purification, and characterization of proteins. This course will supplement 5.100S/5.11L and is offered for six units of credit. It will meet all day on Tuesdays and Thursdays throughout IAP.

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Electrical Engin. and Computer Science

The department will offer a variety of three-unit courses in Electrical Engineering and Computer Science. These are designed to be either precursors or extensions of the department's core courses. For further information, contact Prof. Martin F. Schlecht, x-3407.

VLSI Design and Layout
Participants will have an opportunity to learn the basics of integrated logic circuit design and layout. After a brief introduction to design methodology, computer-assisted design tools will be used to complete several example digital circuits. Enrollment is limited. 6.032 or equivalent is required.

Physical Interpretation of Vector Analysis for Electromagnetism
This course is an in-depth review of the vector analysis required for studies of introductory electromagnetism. The physical meanings for the integral and differential forms used to express Maxwell's equations will be discussed. The rules of vector analysis will be studied. The course is intended for, but not limited to, students planning to take 8.013.

In-Depth Application of 6.013 to Real World Examples
This course is intended for students who have completed 6.013 or its equivalent and would like to study the applications involved in the course to a greater depth. Basic principles will be used to study the design issues and development approaches needed for these and other real world problems.

How to Use Laboratory Equipment for Electronics
For those who have never had an opportunity to use an electronics laboratory, this course will provide a hands-on experience with all of the standard laboratory equipment that is used to build and study electronic circuits.

Research Program in EECS
Ten to fifteen seminars will be given by the department faculty describing their research programs. Relevant literature will be distributed and discussed.

Engineering Design Workshop
Profs. Daniel Hastings and Leon Trilling will lead this workshop in which participants will design (and when possible, build a working model of) a useful device. Last year, the workshop members designed a set of devices useful to a handicapped person confined to a wheelchair (e.g., door-openers, page-turners, devices to get a wheelchair up or down a curb). The class is divided into teams of four to six students; each team does a design; reports daily on progress and presents both an oral and written final report; a graduate student or faculty member acts as an advisor to each team. Open to sophomores, and juniors. For priority enrollment to Second Summer Program participants. The workshop will be scheduled for January 17 to 27.

Foreign Languages and Literatures
Four intensive introductory language subjects will be offered during January. They will meet daily and carry twelve units of credit. Watch the Guide for information on preregistration.

Intensive Japanese (1.2150)
Introduction to modern standard Japanese. Emphasis on developing proficiency in speaking and listening, using basic grammar and vocabulary, development of reading and writing skill. Classroom attention will be focused to fresmen, sophomores, and juniors. No listeners.
Intensive Spanish (I.21.175)
Introduction to understanding, speaking, reading, and writing Spanish. Maximal use of fundamentals of grammar for conscious language lab attendance required. Preference given to freshmen, sophomores, and juniors. No listeners.

Intensive German I (I.21.231)
Introduction to understanding, speaking, reading, and writing German. In-depth review of the use of fundamental grammar in active communication. Language lab assignments supplement class work. Preference given to freshmen, sophomores, and juniors. No listeners.

Intensive Russian II (I.21.261)
A comprehensive course covering the alphabet, handwriting, the Russian sound system, all verb tenses, and a major portion of the declension of nouns and adjectives. For students with no previous background. Extensive use of Russian in class, daily homework, and language lab assignments. Readings on culture and geography. Students completing the course will qualify for second semester.

History
The Experience of War and Battle on Film
We will examine the experience of war and battle as depicted in visual images over the past 20 years. We will look at five short films and draw conclusions. Each film will be followed by a brief talk or discussion. Prof. David Raftstein, instructor.

Literature
Five Funny Films
The Literature faculty will show five comedy films during the term, each introduced by a member of the faculty who will discuss such formed and thematic issues as comic acting styles, comedy as subversion, and reconstruction of received social values. Prof. Irwin Taylor, coordinator.

Management
Organizational Reality
(Or What You Don't Know Could Kill You)
What will your life be like after MIT? Most MIT graduates will spend a major portion of their lives in organizations. Will you know what you need to know when you arrive at your organization? Do you know what you will need to know to thrive, or even survive? We will explore those questions. Several speakers will be selected from MIT's newest and youngest faculty, and there will be the possibility to visit their laboratories in the afternoon. The course will meet daily for one week during the IAP. Prof. Nicholas Herbots, coordinator.

Growth Atom by Atom
This activity is proposed as a continuation of last year's very successful IAP seminar "From Growing Materials Atom by Atom to Looking at Materials Atom by Atom." While we focused in 1988 on characterization, we propose to concentrate on "Growth Atom by Atom." The purpose of this symposium is to provide a basic, in-depth review of growth techniques at the forefront for what we call "Artificially Structured Materials," and present them in the context of research being carried out at MIT and hence accessible to the curiosity of students. By "Artificially Structured Materials" mean materials whose atomic architecture has deliberately been altered by man to create novel materials properties. A good example of such structures is a superlattice, which consists of a stack of very thin films (called a "superlattice") each being of the order of 1 to 7 nm thick, where the mobility of electrons reaches values that could not be attained in materials under the circumstances, unless they are part of a superlattice. Each morning, a specialist will present his or her understanding and scientific perspective on one of the state-of-the-art techniques to grow materials with control on structure and composition at the atomic scale. Coffee and pastries will be provided, and the format will be as relaxed and interactive as possible so that students will get to know the speakers and contribute to the presentation through questions. Several speakers will be selected from MIT's newest and youngest faculty, and there will be the possibility to visit their laboratories in the afternoon. The course will meet daily for one week during the IAP. Prof. Nicole Herbots, coordinator.

Human-Powered Hydrofoil
A student-led group is designing and building a human-powered hydrofoil with the aim of beating the existing power-household boat record. Some construction should be under way in IAP, and there should be possibilities for students to work on this project in Florida in June 1989.

Human-Powered Submarine Project
A group of MIT students, staff and faculty is interested in working on human-powered submarines. More information.

Media Lab
Holography
A laboratory-based exploration of the principles, techniques, and applications of holography as a 3-D image communication medium, emphasizing white-light holography and computer-generated holograms. Lab fee. Limited enrollment. Four meetings. Prof. Stephen Bent, instructor.

Associative Style in Cinematic Narrative
An exploration of cinematic narrative as a function of associative style. Students will be introduced to methods for getting in touch with their own associative styles, take part in an application of those methods to an analysis of development in New Orleans. They will each then develop an original story based on the week's work. Media Lab tours following some lectures. Check the IAP Guide Preview for details and schedule.

Music
Memorable Movies with Music
We will watch some memorable movies and then talk about them and their music. The films may be shown on campus, or we may go to different Boston movie houses. This class will take place three evenings during IAP; contact Martin Marks, x3-8779, for more information.

Physics
Frontiers in Physics for Freshmen
The Physics Department faculty will offer a sequence of eight lectures and laboratory discussions from 11:30 AM to noon each Monday-Friday, January 23-27. This class will be open to all freshmen. The purpose is to introduce freshmen to physics and to give a glimpse of the exciting world of modern physics. The course will be taught in a linkage of concepts throughout the four sessions. This course will be led by Prof. W. J. Ford, Prof. John Darmanin and will meet Monday-Friday, January 23-27.

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Remembering the Vietnam War through Videos

Want to learn about something Dan Quayle would rather not remember? If you never saw the widely-acclaimed PBS series on the thirty-year war in Indochina, this is your chance. The now-classic series presents the war from its roots in French colonialism through the US involvement. "Vietnam: A Television History" will be complemented by several independent documentaries, including "Hearts and Minds" and "Vietnam: A Secret Agent" (since it's on Agent Orange, this is a must for ChemChemE majors who want to make informed career decisions). It will meet for a total of fifteen to sixteen hours during IAP.

A Video Introduction to Social Change in the Third World

If you've never left North America, you've got to see it to believe it. Was, poverty, cultures, customs, and languages you can't begin to imagine. If you've been traveling to see for yourself, you'll want to check out this series of new videos about Asia, Africa, and Latin America. Issues covered include: the movement against apartheid in South Africa, the causes of hunger, village life and the role of women in China, and the wars of revolution and counter-revolution in El Salvador and Nicaragua. It will meet for a total of eight to ten hours during IAP.

Intensive Foreign Languages

Each year Wellesley offers three intensive language classes which meet every day for three weeks during IAP and offer twelve units of MIT credit. This year's offerings are beginning French, beginning Spanish, and intermediate Chinese. Check the Independent section of the IAP guide for details on preregistration.

Going International: A Workshop for Intercultural Living

In our world today, ethnocentrism is no longer a survival skill. Intercultural skills are necessary for the survival of the planet. To develop these skills, students will examine the values and assumptions we carry with us. Through films, educational games, and discussions, students will explore different cultural viewpoints. For more information contact Barbara Brown, Foreign Study Advisor at Wellesley College, 236-0320, x2520, or x187-0320.

Undergraduate Research Opportunity Program Projects

One exciting way to use IAP is going full tilt on a research project designed for a para-clinical client, defining the reproductive cycle of unicellular algae, completing the research for a history of genocide in Cambodia, or anything else you can imagine and can persuade a faculty member to supervise. For information and advice on how to start a UROP project, contact the Undergraduate Education Office, 20B-141. Although you can't do a UROP project just for January, you can start one now and continue it in January. Or start planning and making arrangements now so that come January you're able to concentrate on a project you'll continue in the spring.

Student Research Partners

What if you are a freshman, and aren't sure what you'd like to get into? Need help finding that faculty advisor who can help you find a topic that's right for you? The Wellesley Study Advisor at Wellesley College, 235-0320, x2320, can help. More information contact Priscilla Songshanand, coordinator.

Free Consultation and Advice on Writing

The Writing Center, 14N-317, x3-3090, will offer free consultation and advice on any writing problems, including the following: finding a topic, idea generation, outlining, research, note-taking, citing sources, organizing and drafting, and variety, wordiness, paragraphs, organization, and the use of evidence. The Center can help with Phase I and II papers, as well as with graduate school and job applications, as well as with papers for courses.

Workshops on Engineering Writing: A Review for Graduate Students

These workshops (three sessions within a two-week period) will cover processes of organizing and drafting professional papers, improving writing style, and revising documents in the respective field.

Help with Meeting Phase II

Three two-hour workshops will provide help for revising reports to fulfill Phase II of the Writing Requirement.
Pro Arte's eleventh season gets off to a brilliant start

PRO ARTE
CHAMBER ORCHESTRA

Conducted by Larry Hill and Jeffrey Rink. Ronald Haroutunian, solo bassoon.
Sandarti Theatre, October 2.
Event in The Tech Performing Arts Series.

By DEBBY LEVINSON

The Pro Arte Chamber Orchestra's eleventh season got off to a brilliant start last Sunday night. Although Music Director Larry Hill had been laid low over the summer by serious surgery, he was in top form musically, as were his musicians.

Pro Arte opened with Bach's Suite no. 1 in C, a rollicking and complex piece full of chromatic runs and mathematically crafted phrases. The overture's slow flowing sections were complemented by difficult arpeggios, well-played on the bassoon, and grace-note laden violin lines brought off with aplomb. The harpsichord, though, was barely audible, a problem which persisted during the ensuing Concerto.

The Gavotte I and II, while meshing four separate themes carried by violin, oboe, cello, and harpsichord, weakened in its quieter spots, the violin section sounding somewhat unsure. Fortunately, this weakness was corrected in the fifth movement, Menuet I and II, which displayed not only beautifully hushed passages but showcased the previously quiet harpsichord as well.

The final two movements, Bourree and Passapied I and II featured a lovely, balanced interchange between oboe and bassoon. Lead oboist player James A. Bulger showed Pro Arte producing quite a different sound from the stricter Bach and Vivaldi pieces. There were some problems with the pizzicato ending of the Bourree, but the Sarabande, came across well.

Bassoonist Ronald Haroutunian, one of Pro Arte's founding members, moved during the last section, variances should be fine indeed. Apart from this, Haroutunian showed Pro Arte producing quite a different sound from the stricter Bach and Vivaldi pieces. There were some problems with the pizzicato ending of the Bourree, but the Sarabande, came across well. It was regally played but not overbearing, with pleasant viola and cello sounds. The pleasant solo cello and bass lines were lovely, and highly emotional. A few sour high notes were struck by the violins during the last section, Bourree, but these were corrected quickly.

The final piece, and perhaps the most well-known, was Aaron Copland's Appalachian Spring. A ballet dealing with the emotions of a newlywed farming couple, Appalachian Spring was composed in 1943-44 for a group of thirteen instruments: piano, flute, oboe, clarinet, bassoon and strings.

Rink's opening strains conveyed twin images of dawn and hope with slow, gorgeous violin and viola lines while the piano struck a single bass note. (In this case, slightly out of tune) to punctuate the phrases. Over a moving vibrato, a wistful bearing, with pleasant viola and cello sounds. The piano's quick runs up and down the scale towards the end came across flawlessly. An ethereal middle section was suddenly and precisely interspersed by clarinet and flute, clearing the way for the syncopation and double stops that give this piece a Midwest or Western feel. The final section, variations on the old Shaker hymn Simple Gifts, was inventively done, even the fast, staccato flute scale towards the end came across flawlessly. Appalachian Spring was the highlight of the evening, brilliant finish to an already excellent concert. If this concert is any indicator of the progression of Pro Arte's eleventh season, their future performances should be fine indeed.
There is a Food Addiction Hotline being provided by the Florida Institute of Technology and the Heritage Health Corporation. This hotline is to provide information about food addiction, gather data about the nature and extent of food addiction, and raise the awareness in the population that food addiction exists. The hotline number is 1-800-326-4008.

**CALL,** a toll-free telephone service, is available throughout Massachusetts and provides free information about colleges, graduate schools, financial aid sources, and career opportunities. **CALL** counselors can also refer callers to other sources such as schools, training programs or other education-related agencies available in specific areas. **CALL** operates Monday through Thursday, 9 am to 9 pm; Friday and Saturday 9 am to 5 pm; and Sunday 2 pm to 6 pm at 1-800-326-4171. Counselors are also available on a walk-in basis at the Higher Education Information Center located at the Boston Public Library, 664 Boylston Street, next to the Copley Plum.

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**Food Addiction**

**Food Addiction** is an illness that can be prevented, treated, and cured. It is a disease of the brain that affects both men and women. This illness is characterized by a compulsion to eat, a drive to overeat, and a lack of control over eating. The symptoms of food addiction are varied and can include weight gain, depression, anxiety, irritability, and other physical and mental health problems. The consequences of food addiction can be severe, including obesity, heart disease, diabetes, and even death.

**The Science and Humanities Library (Hayden Building Libraries) are now open from noon Sunday through 8 pm Friday — 24 hours a day — and from 8 am to 8 pm on Saturdays. From mid-February to late April the library is limited to members of the MIT community. Circulation and reference services are not available during restricted hours.**

**The MIT Museum has many ongoing exhibits. The Museum is located at 265 Massachusetts Ave., and is open Monday through Friday 9:30, Saturday 10:30-4. Admission is free.**

**Explorer Dr. Barry Barker of the National Institutes for Exploration is organizing a series of expeditions during 1987 in an attempt to discover the hidden answers of mysterious and strange happenings in Peru. The results of these expeditions will be a full color book representing the best journalist and photographic efforts of more than 100 individuals. For further details, call or write Dr. Barry W. Barker, Director, National Institutes for Exploration, 111 N. Market St., Champaign, IL 61820, 217-322-3667.**

**The Student Conservation Association (SCA) is providing opportunities for about 150 students to obtain expenses-paid volunteer positions in conservation and resource management. Volunteers this winter and spring will serve in such areas as the Virgin Islands, San Francisco, Florida, Ariz., and Hawaii. Telephone the SCA at (603) 236-5266 or send a postcard to: Student Conservation Association, PO Box 550C, Charleston, NC 28203.**

**Today, more than one million men and women are demonstrating their personal example that alcoholism is an illness that can be arrested. If you have an alcohol related problem please get in touch with the Alcoholics Anonymous group nearest you — with complete assurance that your anonymity will be protected. Call 426-9444 or write: Alcoholics Anonymous, Box 459, Grand Central Station, NY 10012.**

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Lincoln Marathon, the nation's leading marathon and creator of the first running counter, returns for a 10th and 11th year with $3,000 to the winner and more than $25,000 to the top 150 finishers. The event begins with the Alarm Tunes on the parade route at 8 a.m. and features more than 1,000 participants. Telephone: 246-4370.

THURSDAY, OCT. 5

CLASSICAL MUSIC
The New England Chamber Consort presents a program of music by J. S. Bach, Domenico Scarlatti, and a recent premiere by American composer George Rochberg at 8 p.m. in Jordan Hall, New England Conservatory. Tickets: $5 general, $2 for seniors and students. Telephone: 536-6340.


JAZZ MUSIC

TUESDAY, OCT. 4

LECTURES


LECTURE: "Merce Cunningham: A Portrait of a Man," by Jennifer Paul, at 6 p.m. in the Kaji Aso Studio, 290 Boylston Street, Boston. Admission: $5 general, $4 for seniors and students. Telephone: 536-5500.

LECTURE: "Merce Cunningham: A Portrait of a Man," by Jennifer Paul, at 6 p.m. in the Kaji Aso Studio, 290 Boylston Street, Boston. Admission: $5 general, $4 for seniors and students. Telephone: 536-5500.

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The Tech Performing Arts Series presents...

MERCE CUNNINGHAM DANCE COMPANY
The Cunningham dance company appears in Boston for the first time in more than a decade. MIT price: $8
John Hancock Hall, October 7 at 8 pm.

JULIAN BREAM
One of the world's most accomplished pianists gives a recital ranging from Bach to Takemitsu and Lutoslawski.
Jordan Hall, October 14 at 8 pm. MIT price: $5
Tickets are on sale at the Technology Community Association, W20-450 in the Student Center. Office hours posted on the door.
Call x3-6885 for further information.
The Tech Performing Arts Series, a service for the entire MIT community, from The Tech, MIT's student newspaper, in conjunction with the Technology Community Association, MIT's student community service organization.

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We can't predict the future, but we do know this: Schlumberger is dedicated to do the best. And in that pursuit, we'd like you to join us.
Or interview with us Thursday-Friday, October 13-14 in the Career Planning and Placement Center.

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If you're about to graduate with an advanced or undergraduate degree in electrical engineering, computer science or related fields including management, let's talk about joining our team of product development designers who work in the following technologies:

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See us on campus
Monday, Oct. 17.
Schedule your interview through the Office of Career Services. Or if you cannot attend, please send your resume to Professional Staffing, Mentor Graphics Corporation, Dept. C3000, 8500 S.W. Creekside Place, Beaverton, Oregon 97005-7161.
We are an equal opportunity employer committed to affirmative action.
The Brattle Theatre continues its film season with Chasing Highs, starring Robert Redford and Sissy Spacek, on Oct. 7. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Brattle Theatre presents Runaway Train (Juliette Lewis), starring Jack Nicholson, on Oct. 8. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents Polynesian Renaissance, featuring the Polynesian Legends, on Oct. 8. Showtimes are 5:45 and 10:00. Tel: 497-2000.

The Brattle Theatre presents Banana Joe (James Naughton), starring Sigourney Weaver, on Oct. 9. Showtimes are 5:30, 8:30, and 10:30. Tel: 497-2000.

The Somerville Theatre presents Boogie Nights, starring Mark Wahlberg, on Oct. 9. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Road (Martin Sheen), starring Keanu Reeves, on Oct. 10. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents Texas Chainsaw Massacre: The Beginning, starring Leatherface, on Oct. 10. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Tin Drum (Bruno Ganz), starring Helmut Berger, on Oct. 11. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Decline of the Western World, starring Michael Moore, on Oct. 11. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Adventures of Alfonso and Cipriani, starring Anthony Quinn, on Oct. 12. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Bible, starring Robert De Niro, on Oct. 13. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Dead Zone, starring Christopher Lloyd, on Oct. 13. Showtimes are 5:30 and 8:30. Tel: 497-2000.


The Brattle Theatre presents The French Lieutenant's Woman, starring Jeremy Irons, on Oct. 15. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The War of the Worlds, starring Tom Cruise, on Oct. 15. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Big Lebowski, starring Jeff Bridges, on Oct. 16. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Terminator, starring Arnold Schwarzenegger, on Oct. 17. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Day the Earth Stood Still, starring Kurt Russell, on Oct. 17. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather, starring Marlon Brando, on Oct. 18. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Mummy, starring Brendan Fraser, on Oct. 19. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Empire Strikes Back, starring Mark Hamill, on Oct. 19. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Passion of the Christ, starring Jim Caviezel, on Oct. 20. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Godfather: Part III, starring Al Pacino, on Oct. 21. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Dark Knight, starring Christian Bale, on Oct. 21. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather: Part IV, starring Al Pacino, on Oct. 22. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Da Vinci Code, starring Tom Hanks, on Oct. 22. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather: Part V, starring Al Pacino, on Oct. 23. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Matrix Reloaded, starring Keanu Reeves, on Oct. 23. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather: Part VI, starring Al Pacino, on Oct. 24. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Godfather: Part VII, starring Al Pacino, on Oct. 25. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Matrix Revolutions, starring Keanu Reeves, on Oct. 25. Showtimes are 5:30 and 8:30. Tel: 497-2000.


The Brattle Theatre presents The Godfather: Part IX, starring Al Pacino, on Oct. 27. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Matrix Revolutions: Extended Cut, starring Keanu Reeves, on Oct. 27. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather: Part X, starring Al Pacino, on Oct. 28. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Godfather: Part XI, starring Al Pacino, on Oct. 29. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Matrix Revolutions: Extended Cut, starring Keanu Reeves, on Oct. 29. Showtimes are 5:30 and 8:30. Tel: 497-2000.

The Brattle Theatre presents The Godfather: Part XII, starring Al Pacino, on Oct. 30. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.


The Brattle Theatre presents The Godfather: Part XIII, starring Al Pacino, on Oct. 31. Showtimes are 5:30, 8:00, and 10:00. Tel: 497-2000.

The Somerville Theatre presents The Matrix Revolutions: Extended Cut, starring Keanu Reeves, on Oct. 31. Showtimes are 5:30 and 8:30. Tel: 497-2000.
Committee examines FLL

A committee formed by Friedlaender in February examined, among other things, making new appointments in the FLL section; deciding on the proper balance of faculty/non-faculty positions within the FLL section; and de- riving on the balance of resources to be put into the level IV courses.

Friedlaender said that the com- mittee, which included members of the FLL section, did not reach any final conclusions. She noted that the FLL section is an "institutional anomaly that no one has been able to deal with."

The FLL committee is burdened with the heavy teaching loads im- cumbent upon foreign language teachers, and thus has less time to conduct research, she noted. Research output is one of the lit- erature's criteria in choosing fac- ulty and granting tenure status.

Currently, 90 percent of the courses in the FLL section are taught by non-faculty, according to Kramsch, who found this fig- ure disturbing.

Freshmen are encouraged to formulate plans for IAP

(Continued from page 1)

The Tech News Hotline: 253-1541

THE TECH APPROACH

ON-CAMPUS INFORMATION RECEPTION

DATE: Tuesday, October 4th
TIME: 4:30PM-6:30PM
PLACE: Building 4 Room 159

Learn about the outstanding opportunities at GTE for people with varied backgrounds and ideas. Before you interview, by attending GTE's On-Campus Information Reception, talk with our recruiters. Ask questions. Find out about the enormous scope of our operations, and the challenging technical and business careers in electronics and telecommunications that GTE has to offer.

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**SinfonovaSinfonova SinFantastic!**

The Tech Performing Arts Series is pleased to announce its most spectacular deal yet. We've arranged to make $48 subscriptions for Sinfonova, Boston's finest chamber orchestra, available at MIT for only $11 for the three concert series.

The concerts, on October 29, February 25 and May 12 include Mozart's Jupiter Symphony, Concerto for Two Pianos, K. 365 (played by the Paratore brothers) and Sinfonia Concertante, K. 364; two Bach Brandenburg Concerti; a Beethoven symphony and overture; and works by Strauss, Pärt and Alfred Schnittke.

Mozart has always been a very special composer for Sinfonova, whose players have an uncanny ability to simultaneously tap Mozartean pathsos and joy, and send the audience away enraptured. But there's something special to everything Sinfonova does, so why not sign up for a subscription at this unusual bargain price?

*Please note that there are limits to the number of subscriptions we can accept at this price; orders will be filled in the order of receipt.*

*Complete the order form in the Sinfonova brochure (only forms stamped with "The Tech" are acceptable; forms are available at The Tech and at the Technology Community Associates, 4th floor, Student Center), including your full mailing address and affiliation with MIT. Mail it with your check payable to "Sinfonova" to Jonathan Richmond, at MIT Room 1-090. Your ticket will be returned by mail.*

**Three great concerts for only $11!**
Departments to administer Phase II

(Continued from page 1)

Department of Mathematics, was asked by the department chair to take on the position. Kleiman asked by the department chair to handle borderline quality students. Perelman said. Students satisfying Phase II are incorporated, very bright" kid who did not graduate last year. Other professors were interested in nuclear engineering, but Driscoll was not sure if he was doing, did a good job," Driscoll said. "I'm certainly proud of him." Driscoll did remember that Driscoll said. "I'm certainly looking for a job, applying to graduate schools, or achieving a separate course, it is being taught with the technical course a student takes." Writing cooperative subjects have existed in some form at MIT since 1957, though they were only formally established as a program in 1976. In addition to structural changes, the revisions also include stricter and firmer rules for enforcing deadlines. Although there have always been deadlines for satisfying the Phase II requirement, they have never really been enforced, according to Perelman. In the future, students who do not meet the deadline will be forced to take a writing class the next term, Perelman said. In this way, seniors will be forced to take the consequences if they procrastinate on Phase II, Perelman noted. Compelling a senior who has not satisfied Phase II to take a writing class will also alleviate the worry about not graduating in the spring term and will allow him to concentrate on looking for a job, applying to Rick Hauck commands space shuttle Discovery

(Continued from page 1)

In 1985, Hauck became the first thesis student for Professor Michael J. Driscoll NuclE '64. What Driscoll remembers of his student was a "very well-organized, very bright" kid who did a great job on his thesis on a nuclear reactor. Hauck was very interested in nuclear engineering, but Driscoll was not sure if he had a deep interest in space at that time. Other professors were working on the space program, but Hauck chose to do a nuclear engineering thesis, Driscoll noted.

Driscoll did remember that two seniors did not graduate last year because they did not fulfill Phase II. No exceptions will be given this year either if seniors do not complete the requirement, he affirmed. This year, students need to find out from their department when the deadline is for satisfying Phase II of the writing requirement. Next year, the deadline will be the end of the fall term of the senior year, Perelman said.

Erratum

Because of an editing error, the article "Preface calls for new R/G commis-
sion" (page 30) assumed Undergraduate Association President Jonathan Katz's position. Katz believes a committee should focus on the entire housing situation, rather than "looking at little parts."

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**sports**

**Graduate students top IM cycle race**

By Dave Connoly

A pair of graduate students carried the day in the annual MIT intramural cycling road race. Mike Lagasse and Kumiko Murasugi placed first among the women. Theta Xi won the team trophy.

Fifty-three riders started the three-lap, 32.8 mile contest. A large group of cyclists remained bunched together at front throughout much of the race. The group, numbering 30, completed the first lap in a fast 27:03. Although the pace later slowed, the pack's ranks were reduced to ten by the finish of the third lap.

As he rounded the last turn before the finish, Lagasse sprinted into the lead for good, winning with an average speed of 23.25 mph. Closest following were Mark Drela '92 and Matt Thompson '89.

Lagasse was unable to turn the corner on a sweep. MIT had the ball on their own 14-yard line and two minutes to go. But the Warrior defense smelled victory, and came swarming in. The Beaver line collapsed under the onslaught, and after the right and left defensive ends met in the middle of Day's chest, the 14-yard line became a blank.

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Emerging as a powerful force in the American market, RECRUIT U.S.A., INC. would like to tell you about the wide variety of challenging positions in the U.S., as well as in Japan, for ambitious Computer Science, Liberal Arts, Engineering and Business majors. Learn more about the powerful giant who emerged from Japan by attending our information session!

**INFORMATION SESSION**

DATE: Fri., Oct. 14th
TIME: 4:30PM-6:30PM
PLACE: 8-105
MIT wins Salem State toumey

By Nyla Hendrick

The MIT women's volleyball team captured the Salem State Invitational Championship this past weekend, thus improving to a match record to a flawless 17-0 overall.

During the course of the two-day tournament, the Engineers soundly defeated Salem State College, Fitchburg, Eastern Nazarene College, Rogers Williams College, Southeastern Massachusetts Universities, Gordon and Eastern Connecticut State College. All teams are regionally ranked and four are being considered for national contention.

Although the team got off to a slow start, string performance in serving, hitting, and digging by all team members helped bring the tournament to a victorious end. An all-around outstanding performance by Cecilia Warlinkski '90 led her to be selected as the all-tournament team.

This week, the team travels to Brandeis University on Tuesday and Gordon College on Saturday where they hope to continue their winning streak.

(Nyla Hendrick '92 is a member of the women's volleyball team.)

Play Bridge at the MIT Bridge Club

Become a member of the MIT Bridge Club which has a history of producing National and World Bridge Champions.

Everyone is welcome regardless of playing ability. Lessons will be given by Life-Masters, the highest rank in Bridge.

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Saturdays in Student Center (Lobdell Meeting Rm)

7:00 PM for lessons

7:30 PM game time

David Rho at 225-7522 or 621-0744

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(Nyla Hendrick '92 is a member of the women's volleyball team.)
Bentley bests MIT baseball

By Mitchel Banas

The MIT women's baseball team suffered a heartbreaking loss Friday afternoon to Bentley College. Near the end of the game, however, more concern was given to Scott Williams, '90 who was hit by a pitch near his left temple. The ball caught him right underneath the helmet. Williams was down by the plate for over 20 minutes. Finally, an ambulance came to take him to the hospital where he eventually was released after an examination.

Although the team needed several stitches for the cuts, the possible outcome could have been much worse.

Williams is healthy. Otherwise, this game might have been a much more painful loss for MIT to swallow.

On Saturday, the Engineers played a double-header against the University of Massachusetts at Boston and came away with two promising victories. In the first game, Eric Hopkins '92 again had an amazing game with four RBIs as MIT hardly won both games 8-4 and 5-1. Another veteran stole the spotlight in the second game, Matt Grim '92, a lefty starter for MIT, went the distance, allowing only three hits and one run while striking out five. Manager Paul O'Brien was very pleased with the performance of his relatively young and inexperienced team. "We have made excellent progress since September 1 in preparing ourselves for the spring season."

MIT will be hosting WPI at 3:30 Friday afternoon.

Soccer falls short against Holyoke

By Al Armendariz

The MIT women's soccer team lost a close but disappointing game against New England Women's Eight Conference rival Mount Holyoke College by a 2-1 score. Bentley College scored first, and seemed to be on their way, after a beautiful pass off of excellent saves by the Mount Holyoke goalie and their relentless offense gave the Lyons control of the game and victory.

The Engineers took the lead on a strong second half performance. After a scoreless first four minutes, the Flyers put the ball past Holyoke goalie to take the lead. The Lyons came back midway through the first half to tie the game on a corner kick.

Mount Holyoke then scored on a textbook header-goal that tied the game at one apiece only minutes before halftime. This goal seemed to drain the energy from the Engineers and the Lyons carried this momentum into the second half.

With only minutes to go before the final whistle, the Engineer offensive was called, and the ball went towards the Mount Holyoke goal within two minutes. All five attempts failed to produce a goal, and when MIT could not convert a last-chance corner kick, the Lyons came away victorious.

The team faces off against conference opponent Wellesley College today at 7 pm on Jack Barry Field.

Textile Regatta opens crew season for women

By Beth Jones

The MIT women's novice and varsity crews raced this past Sunday in the Textile Regatta. Even though this was the first race of the season all the teams needed well, especially the varsity crew who competed at a higher level than in years past. The varsity first boat competed in the championship eight race, the most competitive of the women's events.

The three mile head races were held on the Merrimack River in Lowell. In a head race, crews start one at a time in ten second intervals and the crew with the fastest time over the three mile course wins. Starting sixth out of nine boats, the championship eight had a good position for overtaking boats who started before them. MIT started well and passed two boats, Connecticut College and Colgate, within the first mile.

Next MIT started moving up to pass Boston University's second boat. BU would not give way to let MIT pass, but cost BU a 30 second penalty. After a grueling two miles of head to head racing with BU, MIT finished the race with a time of 20:26. The time was good enough for third place. They were beaten by BU's first boat (20:07), and University of Massachusetts (20:17).

MIT's second eight raced in the club eight event. They raced well, but were disappointed about losing to the first place boat, Colgate, by only two seconds. MIT's second place time was 21:16.

The best finishers of the day were the lightweight four of Lola Maruyski '91 (stroke), Laura Beers '91, Catherine Anderson '90, Karen Lewis '89, and Tricia rinse '90 (coxswain). They came in first out of six boats with a time of 22:26, 26 seconds ahead of the second place boat, Riveride.

The novices raced in four boats of eight and came in second, eighth, 10th, and 11th. The first boat was boated by a more experienced boat from Worcester Polytechnic Institute. The second novice eight was handicapped when one of the riggers tore loose from the boat and they were not able to have all eight row at once. The varsity coach, Mayrene Croft '91, was pleased with the results and is looking forward to improving and winning some more races this fall. The women will race next Saturday in the Mount Holyoke Women's Regatta.

(Beth Jones '90 is a member of the women's varsity crew team.)
By Harold A. Stern

McNamara might have been a natural letdown after a big win on opening night. Maybe it was because they were not used to playing at night. And maybe it was because they stayed up too late the night before.

Thursday night's completions problems, the MIT varsity football team lost a game they should have won Friday night, and they lost because they were up against a Merrimack College squad that just played harder.

Dropped passes, third down plays that failed, and offensive collapses in key situations made the difference in the Engineers' 12-7 defeat.

On the plus side for MIT, the top of the offense got in gear again, the Beaver offensive line other than two mistakes, played well all over the field. The Warrior defense played better, and the offense was better in the redzone.

The coaching staff had been working on the offensive line, and it showed Friday night as the offense was more consistent in its running, passing, and blocking strategies.

Merrimack started to drop back that "forgot to take two steps" and pretend to kick before running, "one of the Warrior cornerbacks hadn't turned around yet," he added. The Merrimack defender stopped Moose short of the first down, and ended MIT's last drive of the day.

After the Beaver defense stopped Merrimack short again on a fourth down, the play which broke the Beaver's back occurred: Day, changing the play set in the sideline, sent

The toughness of the Tech squad was visibly demonstrated when left link Arlene Yang '91 broke the contest on the Tech goal, but Merrimack kept pressing the vase. The first goal came on a penalty shot by Clark's Mar- 

Field hockey's road woes continue

By Bruce Brobst

Although the MIT field hockey team has performed well on the grass, it has had its share of problems when it comes to playing on the ice. The Engineers are currently 4-5-1, which is not a bad record, but it is certainly not the one that was expected at the beginning of the season.

The team has had to deal with injuries to key players, as well as some bad luck in close games. However, they have had some positive moments as well, such as beating Colby College 1-0 and tying Dartmouth 0-0.

In Saturday's game, the first 25 minutes were marked by even play on both sides and a quick glove save by Shapleigh on a penalty shot by Clark's Mac- 

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