

Tech Topics

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Michigan Tech's Faculty-Staff Newsletter

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Senate Hears Budget Update

The administration plans to recommend a deficit budget to the Board of Control May 10.

The University had expected to ease into the black by the end of the next fiscal year. However, the 8.5 percent tuition cap imposed by the state will reduce projected revenues for 2002-03 by about \$1.9 million, **Pamela Eveland**, director of planning and budgeting, told the University Senate May 1.

A variety of unanticipated cost increases, including \$245,000 for graduate student health benefits, over \$100,000 for Internet security requirements and a two-fold hike in the cost of property insurance since Sept. 11, will add another million dollars in new expenses to the deficit, she said. As the budget stands, MTU would end the next fiscal year \$3,055,000 in the red.

The budget includes no raises—and no increases in any other kind of compensation—for any employees. Both the president and the provost had recommended raises, but considering the anticipated deficit, the Board of Control has balked at any wage and salary increases.

Senator **Mike Roggemann** (Electrical and Computer Engineering) asked what would happen if the Board of Control rejects the budget.

The Budget Advisory Group is looking at a variety of alternatives, Eveland said. "What's not under discussion at this time is a unilateral cut," she said.

"Sometimes you have to decide not to do something anymore," Roggemann noted, which can become an opportunity to refocus the institution's priorities.

It's difficult to develop a consensus on what to cut, Eveland said, but that's what the University is attempting to do.

"Are we trying to avoid laying off anyone?" Senator **Jim Gale** (SBE) asked.

"Yes," she said. "No raises, but no layoffs."

Senator **Carl Vilmann** (MEEM) asked if there is a plan to get into the black next year. "The short answer is no," Eveland said.

"We have various scenarios, but they aren't

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You can stand tall without standing on anyone. You can be a victor without having victims.

—HARRIET WOODS

Chen to Give Commencement Address

Michigan Tech alumnus **Charlie C. Chen** returns to his alma mater May 11 to deliver the Spring Commencement address.

Chen came to Michigan Tech in the 1960s after earning his bachelor's degree in mechanical engineering from the National Cheng-Kung University, in Taiwan. He completed an MS in Metallurgical Engineering at MTU in 1967 and stayed on to finish his PhD in 1971.

After working seven years as a senior metallurgist, he ventured out on his own and is now founder and president of three businesses.

In 1981, he began Chen-Tech Industries, based in Irvine, Calif. The company specializes in aerospace alloys used in defense and transportation industries. Two years later, he founded Chen-Tech Industries in Taiwan, and in 1993 started Far East Materials Technology,

Michigan Tech to Award 900 Degrees at Commencement AOL Executive to Receive Honorary Doctorate

At Spring Commencement on May 11, Michigan Tech will honor the achievements of more than 900 students completing their degrees.

A total of 788 students will receive bachelor's degrees, with 26 earning associate in applied science degrees. Twenty-four doctorates will be awarded, along with 85 master of science degrees and five master of engineering degrees.

Receiving an honorary Doctorate in Business will be Copper Country native **William Raduchel**, of Palo Alto, Calif., who is now a member of the executive team at AOL Time Warner.

Raduchel attended Michigan Tech before earning a bachelor's degree in economics from Michigan State and both a master's and a doctoral degree in economics from Harvard University.

He has served as senior vice president of market development and chief scientist for

Horvath, Wiens to Receive Silver Medals

Michigan Tech will present Board of Control Silver Medals to two distinguished alumni, **Patrick Horvath** and **Harold Wiens**, at Spring Commencement May 11.

Horvath, a native of Stephenson, received a bachelor's degree in metallurgical engineering from Michigan Tech in 1967. He also studied at California State University, Long Beach, where he earned a master's degree in business administration in 1973.

Horvath worked nine years as a metallurgist for Wyman-Gordon Company, first in Massachusetts and then in California. He spent three more years at an independent materials testing facility.

In 1979, he founded Accurate Metallurgical Services, Inc., a firm that tested metals and composites. Two years later, Horvath founded H&H Heat Treating, Inc., which also served the

also in Taiwan. The company forges aircraft-engine and airframe parts.

In 1993, Chen became chairman of MPM Technology Resources, based in Pomona, Calif. The company specializes in precision casting of a number of components, including golf club heads.

Chen was named a fellow in the American Society for Metals, International, in 1987. He also is a member of Minerals, Metals and Materials Society. He was elected first honorary consultant to the Republic of China's Forging Association in 1993. He also has been a technical consultant to the Industrial Technology Research Institute in Taiwan and to the Metals Industries Research and Development Center, also in Taiwan.

Chen is the co-founder and chairman of the Taiwan Titanium Association, which was formed in 2000.

McGraw Hill, Inc. and vice president for document systems, Strategic Business Office, at Xerox Corp. In 1988, he joined Sun Microsystems, where, over the course of 11 years, he was chief information officer, chief financial officer, acting vice president of human resources, and vice president of corporate planning and development.

In 1999, Raduchel joined AOL Time Warner, where he is a senior member of team that determines the technology strategy of the combined company.

He is a director of Myriad International Holdings and a member of the National Advisory Board for the Salvation Army; the National Academy of Sciences Board on Science, Technology and Economic Policy; and the National Academy Committee on Internet Navigation and Domain Name Services. In 2001, Raduchel was named chief technology officer of the year by Info World Media Group.

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MTU Notables

Recent graduate **Andrew Anderson** has received national recognition for his work on a chair for students with autism, undertaken while he was at MTU.

The Rehabilitation Engineering and Assistive Technology Society of North America named Anderson's paper, "Development and Evaluation of a Thoracic Pressure Chair for a Student with Autism," as one of the top five student design papers at this year's conference. Anderson received a BS in Biomedical Engineering in May 2001. The research was funded by the National Science Foundation.

Five Michigan Tech students have recently been recognized by the Goethe-Institut Chicago (German Cultural Center) for outstanding achievements in German. Selected among those who began studying German at MTU was **Morgan Stacey** (Humanities).

Sakiko Suzuki (Biomedical Engineering) was chosen as best student on the second-year level. **Beth Blumhardt** (Materials Science and Engineering) received the award for superior performance in third-year German. **Katrina Settles** (Geological Engineering and Sciences) earned the prize for excellence on the fourth-year level. **Kyle Grahn** (ME-EM) was honored for outstanding performance on the highest level of German at MTU. All students received a certificate of recognition and a book.

Board of Control to Meet May 10

The Board of Control will meet on Friday, May 10, at 9 a.m. in Memorial Union Ballroom B.

Among the agenda items are the operating budget, tuition rates, room and board and apartment rental rates for the year 2002-03.

Board meetings are open to the public, and all members of the University community are welcome.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, *Tech Topics* editor
Tech Topics Web site: www.mtu.edu/news/ttopics/

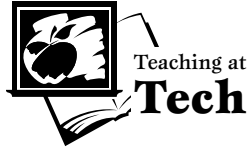
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- By e-mail to ttopics@mtu.edu
- By campus mail, send typed copies to *Tech Topics*, University Relations.

Each week, the deadline for submitting information is **Friday at 5 p.m.** for publication the following Friday.

Contract Grading

Center for Teaching, Learning,
and Faculty Development



By William Kennedy, director

Could the way that you grade your students partially determine the nature of their learning? That's one of the

assertions reported in a recent article on contract grading by SBE assistant professor **Amy Hietapelto** and Tammy Bunn Hiller, a colleague at Bucknell University.* Critics of grading practices have long held that traditional grading encourages students to focus on passing tests rather than on understanding the discipline. Proponents of mastery rather than performance-based learning contend that allowing students some choice in establishing their learning outcomes can encourage deeper and more durable learning.

Hietapelto and Hiller's experience, allowing students to make choices about how their grade will be determined can encourage healthier attitudes about grades and a more intrinsic desire to learn. The view that students should actively participate in their own learning indicates a shift in some higher education circles from the professor as the "sage on the stage" to the professor as the "guide on the side"; a facilitator who creates rich, challenging and diverse learning environments to spur student development. In this more-progressive view, learning becomes a shared responsibility between students and their professors. Contract grading acknowledges that within a given course there are multiple paths to success and many ways that students can exhibit mastery.

Contract grading allows students and faculty members to accommodate diverse learning styles and learning preferences. "By providing a menu of learning options . . . students can select assignments and experience instructional techniques that match their learning styles, as well as being exposed to

choices that may . . . promote their development," the article observes. Perhaps most importantly, Hietapelto and Hiller found that 94 percent of their students overwhelmingly preferred contract grading to traditional grading practices regardless of their standing or the nature of the course.

In practice, contract grading works best within reasonable limits, the authors argue. Learning contracts are developed cooperatively by faculty and students. Students elect evaluative components from a menu of options created by the faculty member. Some assignments can be required of all students. Optional assignments might include "personal journals, reflective papers, research papers, case analyses, and a wide range of individual and team projects." Advanced sections composed largely of upper-level students might be allowed more choice in establishing their learning contracts than beginning students.

In establishing contracts, students are encouraged to choose a wide variety of types of assignments and to build in contingencies that allow them to discuss works in progress and to submit improved drafts. Students are allowed to renegotiate contracts at least once during the semester to accommodate unforeseen developments or to allow for emerging interests. In all cases, acceptance of contracts is done by mutual agreement with the instructor setting reasonable limits.

The authors caution that there are perils associated with contract grading, including 1) a tendency of a few students to only select assignments that build on their present strengths, 2) maintaining a balance between empowering students through choice while not degrading course standards, 3) handling the increased burden of administering such a complex grading system, and 4) demonstrating to colleagues that higher-than-average course grades are the result of improved learning and not inflated grading.

* Tammy Bunn Hiller and Amy B. Hietapelto, "Contract Grading: Encouraging Commitment to the Learning Process Through Voice in the Evaluation Process," *Journal of Management Education*, December 2001, pp. 660-84.

Workshop for Grant Seekers May 14&16

Anyone seeking grant money is invited to a free presentation by Librarian **David Bezotte**, set for May 14 and again on May 16, 10 a.m. to noon at the Van Pelt Library.

Bezotte will give an orientation to the library's Foundation Center Cooperating Collection, which includes directories of foundations, directories of grants and infor-

mation on the grant-seeking process. Attendees will have a chance to use the collection and search the databases of private and corporate foundations.

To register or for more information, call 487-2500 or e-mail instrlib@mtu.edu. The deadline for registration is May 13; seating is limited, so register early.

Nominate Excellent Employees Now

A pat on the back is nice, but \$1,500 is better. If you know someone who deserves an Employee Excellence Award, don't forget to submit a nomination by 5 p.m. on May 7.

Forms are available at the Staff Council Web site, http://www.admin.mtu.edu/staff_council/nomination. Nominations can either be submitted at the site or by printing out a copy of the form and returning it through campus mail.

Love, Italy and Movies at the Next Club Indigo

By Joe Kirkish

Think pasta, vino, "Volare," "O Solo Mio," beautiful women with black curly hair, rolling hills, Mafia, love of family tradition. Think Italy.

The love affair of Americans with things Italian is almost legendary. We are fascinated with that boot-shaped country that has sent us Sophia Loren, Gina Lollobrigida, Mario Lanza and, with his Godfather series, filmmaker Frances Ford Coppola—and which has introduced us to its language through songs and, of course, through its movies.

"Cinema Paradiso" is one of the latter, but its charm is also drawn from another of our loves: movies about movies. This remarkable film will be shown as this month's Club Indigo feature on Friday, May 17, at 7:15 p.m.

It focuses on a country boy's adoration for a pretty school girl woven through with his very special friendship with an old projectionist who teaches him how to love women—and movies.

The movie spans one boy's life (Salvatore) from his youth in the 1940s to the present, when we meet him as an adult, a successful filmmaker living in Rome. Upon hearing of the death of his old friend and mentor, he returns to that place of his childhood memories, and there the story of his life unwinds in delightful, rose-colored flashbacks.

In his memory, the boy grows up, surviving a range of incidents that vary from amusing to tragic, from universal to remarkable, from humiliating to triumphant. When he returns to his mother's home and for the funeral of the old projectionist, he experiences a great surprise left behind by the old friend, a gift that climaxes in an unexpectedly joyous ending and what is possibly the greatest montage in all film history.

With this tender movie, Giuseppe Tomatore proved his talent as a consummate filmmaker and rightfully received world awards including the 1989 Academy Award as Best Foreign Film.

The movie will be preceded at 6 p.m. by one of Club Indigo's most popular food fares, an Italian buffet created by a bona fide Italian chef from the Keweenaw Coop, Chef Bill Caputi.

The movie and film are \$13; the movie alone is \$3.50 (both discounted for children). Reservations are required for the buffet only: Calumet Theatre at 337-2610. Sponsors making this event possible are the Mu Beta Psi music fraternity, Swede's Keweenaw Minerals in Copper Harbor and Julio's Contracting Company in Ripley.

The next program, on June 21, will feature a romantic comedy about life, love and dancing from down under: "Strictly Ballroom."

Gospel Choir Presents "Blessed Assurance"

Submitted by the Department of Fine Arts

"Every year we try to bring the community something special in our spring concert," says **Inetta Harris**, choirmaster of Echoes From Heaven Gospel Choir. This year, Echoes will present "Blessed Assurance" on Sunday, May 5, at 4 p.m. in the Rozsa Center, with many new gospel songs and interpretive dances choreographed by Harris. Graduating senior and assistant choirmaster **Kevin J. Walker** will direct a portion of the program. The choir will be accompanied by Harris on piano, bassist **Andy Gardner** and drummer **Ray Francis**.

Echoes is an active group, with students from Michigan Tech and Finlandia University as well as members of the community.

Rozsa Center to Host Three Pine Mt. Music Fest Events

The Rozsa Center will host three events during the Pine Mountain Music Festival, beginning with a piano recital by Ralph Votapek, Gold Medal winner of the first Van Cliburn International Piano Competition. The Rozsa series continues with two performances of Johann Strauss Jr.'s immensely popular operetta, *Die Fledermaus*.

For tickets, call or visit the Rozsa Center Box Office (487-3200). Single tickets are available, but subscribers to six or more events save up to 25 percent on the full series, receiving several concerts free. First-time subscribers (to six or more concerts) can benefit from a special, introductory discount of 50 percent off the regular price. Details are on the PMMF web site, <http://www.pmmf.org>.

Votapek, professor of piano and artist in residence at Michigan State, has built a distinguished career as an international performer and recording artist, touring regularly in South America and Asia. He has performed with most major orchestras in the United States to critical acclaim. His solo recital at the PMMF will be June 23.

Votapek joins the PMMF Symphony on June 27 as soloist in Beethoven's Piano Concerto No. 3. Also on the concert will be the overture to Mozart's "Abduction from the Seraglio" and Elgar's "Enigma Variations."

Capping off the Rozsa series on June 28 and 30 is "Die Fledermaus," waltz king Strauss's masterfully funny operetta. The plot evolves from a prank victim's playful revenge

formed 12 years ago, the choir performs throughout the year in schools and churches and recently returned from a spring break tour of the San Francisco Bay area. In recent years, the choir has performed in New York City, Washington, DC, Minneapolis and lower Michigan, and made a two-week concert tour of Spain.

Songs for this concert include "I Wanna Be Ready," "Clap Your Hands," "Blessed Assurance," "Jesus Walked This Lonesome Valley," "I Believe I Can Fly," "When We All Get to Heaven" and other gospel favorites.

Tickets for the concert are available from Rozsa Center Ticketing Services (487-3200 or <http://www.tickets.mtu.edu>) and other MTU ticket offices for \$8 general, \$4 students.

and grows more complicated—and funnier by the minute—through a series of infidelities and mistaken identities. "Die Fledermaus," among opera and musical theater's most popular works, has been described as "not the best operetta, but THE operetta." It will be performed in English (with dialogue projected above the stage). PMMF opera performances are always with live orchestra.

Other events in the 2002 PMMF Season include Mozart's "Don Giovanni," the Bergonzi String Quartet and Stage Hits—Opera to Broadway! (a revue by the Don Giovanni cast). All three are in the Calumet Theatre. Organist Susan Brattain will perform in the Community Church of Calumet and Lyric Opera make-up artist Claire Moores will give a demonstration/lecture.

Other chamber music events include a concert of new music (which will include the world premiere of a piece by German composer Siegfried Matthus) and a student concert (free) by members of the unique PMMF Honors Orchestra Program, a partnership with the Michigan Tech Summer Youth Program in which talented high school musicians audition to sit side by side with professionals to play for fully staged opera.

The Pine Mountain Music Festival receives financial support from the Michigan Council for Arts and Cultural Affairs and from many individuals and businesses. National sponsors are MJ Electric, the Blizzard Corporation, the Herbert H. and Grace A. Dow Foundation and the Keweenaw National Historical Park.

New Weight Watchers Series Begins May 13

The next session of Weight Watchers The At Work Program will begin on Monday, May 13. You may attend at no obligation on Monday, May 6, for more information or to see if this program is right for you. Since Weight Watchers began meeting on campus in October, participants have shed 485.6 pounds.

The meeting will be held in Memorial Union Ballroom B1. The cost of the 12-week series is \$113 with a Blue Cross Blue Shield card.

The Weight Watchers leader is Joann Stiglich. The campus contact is Nancy Bykkonen in the Benefits Office. If you have any questions, contact Joann at jms2@up.net or Nancy at nabykkon@mtu.edu or 487-2517.

Budget *Continued from page 1*

formalized into a budget, partly because the current five-year budget model hasn't been working." However, she said, she has been working to develop another model that should be more realistic.

Regarding enrollment, she said the budget draft includes a conservative projection of no increase in freshman enrollment over last fall. However, current figures from Admissions indicate that we may see an increase in new students next year.

Controller **Dan Greenlee** noted that 70 percent of MTU's budget goes for salaries and benefits. If layoffs are to be avoided, that doesn't leave a lot of room for cuts.

Ingrid Cheney (Human Resources), assistant director for benefits/wellness, addressed the senate on the new health-care benefits package. "How is the plan working for you?" she asked. When there was no immediate response, she said the only concern she had heard was that a number of employees enrolled in the standard plan had wished that they had chosen the premium plan.

Over the last six years, the University has seen an 81 percent increase in health care costs, though costs have stayed under budget for 2000 and 2001, she said.

And the new health-care benefit plan seems to be meeting at least one of its goals, to reduce projected costs by about \$750,000. The University should collect about \$600,000 in premiums in 2002. The plans also have employees paying a greater share of the cost of services such as physical therapy and chiropractic care.

MTU POSITIONS AVAILABLE

Job descriptions will be available at 1:00 p.m. on Friday, or by e-mail at <JOBS@MTU.EDU>.

The following position will be posted Friday, May 3, 2002, at 1 p.m. through noon, Friday, May 10, 2002, in the Human Resources Office.

Manager, Mail Services—University Relations

University employees are reminded to apply in writing prior to noon, Friday, May 10, 2002, to be considered as internal candidates for bargaining unit positions only. Applicants from the recall pool will be given first consideration for non-bargaining-unit positions only. Vacancy announcements are normally posted every Friday at 1:00 p.m. in the Human Resources Office. Complete job descriptions are available in the Human Resources Office or by calling 487-2280. More information regarding employment opportunities is available by calling the Job Line at 487-2895. Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

Senator **Tony Rogers** (Chemical Engineering) cautioned that employees should make sure that they don't pay more than the maximum out-of-pocket expenses provided for in their plan. Rogers is a member of the Benefits Liaison Group, which was formed to develop the best possible benefit plan for employees within financial constraints set by the University.

Senator **Kelly Strong** (SBE) praised both the Benefits Liaison Group, for developing the plan, and the administration, for forming the group and implementing their plan. "It's a model that actually worked," he said.

Graduate Dean **Bruce Rafert** told the senate that the number of graduate applications has jumped 18 percent, the first increase in nine years. And the number of applications from international students alone has risen 60 percent, he said.

In addition, the University is investigating a possible distance-learning relationship with a higher-education organization in Malaysia, he said. As conceived, MTU would offer a BS in Engineering with three areas of concentration: mechanical, electrical and computer engineering. Initial estimates are that 180 students could be in the inaugural class, with total enrollment rising up to 1,000 students. However, these numbers are very preliminary and could change drastically.

The program would offer major advantages to Malaysian students, particularly since student visas have become a major political issue. Instruction could be delivered in a variety of ways, from DVDs and streaming video to adjunct professors.

On the minus side are the many problems involved in operating in a different country and the logistics of offering a baccalaureate curriculum half way around the world.

Rafert stressed that the proposal is not etched in stone. "So far, there are no formal negotiations, just informal dialogue," he said.

Despite the hurdles, however, MTU could be in a position to offer an important and profitable program. "Distance learning of the engineering curriculum is something Michigan Tech does very well," he said.

Representing the Senate Computing Committee, Senator **Dickie Selfe** (Humanities) rolled out a proposal to centralize instructional technology in an Educational Technology Center. The center would maintain instructional technology in classrooms and include a central server that would provide access to technology to classes in all departments. The plan also calls for the formation of more "smart" classrooms.

To see the entire proposal, go to http://www.hu.mtu.edu/~rselfe/senate/computing/ETC_proposal4.pdf

The committee is working with Advancement to form an endowment to support the center.

May

- 3 **Friday**
8 p.m.—Don Keranen Memorial Concert—Rozsa Center
- 5 **Sunday**
4 p.m.—Echoes from Heaven Gospel Concert—Rozsa Center
- 11 **Saturday**
10:30 a.m.—Spring Commencement—MacInnes Student Ice Arena
- 13 **Monday**
noon—Weight Watchers At Work meeting—Memorial Union Ballroom B1
- 14 **Tuesday**
10 a.m.—Dave Bezotte, orientation to Foundation Center Cooperating Collection—J. R. Van Pelt Library
- 16 **Thursday**
10 a.m.—Dave Bezotte, orientation to Foundation Center Cooperating Collection—J. R. Van Pelt Library

Silver Medalists *Continued from page 1*

metals industry. He served as president of both corporations, which he sold several years ago when he retired. He spends his winters in Whittier, Calif., and summers in Stephenson.

His professional associations include membership in the American Society for Metals and the American Institute of Mining Engineers.

A member of Tau Beta Pi Honorary Society while at Tech, he is a life trustee of the Michigan Tech Fund Board of Trustees and a member of the McNair Society, the Presidents Society and the Dillman Society. In 1998, he was inducted into the University's Metallurgical and Materials Engineering Academy.

Wiens graduated from Michigan Tech with a bachelor's degree in mechanical engineering in 1968 and started work at the 3M Company.

Wiens has had managerial responsibilities since 1980, including six years with 3M Europe and three years as head of 3M's largest international company in Japan. As 3M Company's executive vice president of industrial markets, Wiens leads many of 3M's strongest and most innovative businesses from its St. Paul, Minn., headquarters.

He is a board member of the National Association of Manufacturers, including serving as chair of the group's Trade and Technology Committee. He also is a member of QIC, an industry consortium specializing in standards for networking memory backup devices.

Wiens is a member of Michigan Tech's National Advisory Board and the Michigan Tech Fund Board of Trustees. He also has been inducted into MTU's Academy of Mechanical Engineering-Engineering Mechanics, which recognizes the department's outstanding graduates.