

Tech Topics

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Michigan Tech's Faculty-Staff Newsletter

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Tuition and Fees Increase by 4 Percent

Submitted by the News Bureau

The Board of Control voted June 29 to boost tuition and fees 4 percent this fall.

At its regular May meeting, the board had increased tuition and fees by 3 percent, but reserved the right to revisit the issue since state appropriations had not yet been finalized. When a legislative conference committee set Michigan Tech's general fund appropriation at a figure lower than what university officials had expected, the legislature at the same time informed universities that they could increase the cap on tuition and fees from 3 to 4 percent without penalty. The board took advantage of those guidelines in setting the new rates, which call for a tuition hike of 3.78 percent and a student approved activities fee increase of 0.22 percent.

As a result, resident undergraduate lower division (freshmen and sophomores) students will pay tuition of \$4,530 for the two-semester academic year, while upper division (juniors and seniors) students will pay \$4,744. Nonresident lower division undergrads will see their tuition rise to \$11,086, while upper division nonresidents will pay \$11,784.

At the graduate level, Michigan residents will pay \$4,872 in tuition for the 2000-01 academic year, while nonresident graduate students will see their tuition rise to \$10,008.

GM Offers Discount Program to Tech Employees

General Motors Corporation recently opened its supplier discount program to Michigan Tech employees. This program provides discounts on new automobiles at participating dealers. Details can be found at <http://www.gmsupplierdiscount.com/> or by calling 1-800-960-3375. You may also contact **Ingrid Cheney** in Human Resources who is the local point of contact for the program.

In order to participate in the program you must request "GM Form 1753" either from the Web site or the 800 number. Employment (and therefore eligibility) is verified by a Michigan Tech pay stub. You must also disclose your intentions of buying a vehicle under this program at your first contact with the dealer. Currently all local GM dealers participate in the program.

Bowen: "Most Productive Year in Michigan Tech History"

In his report at the last Board of Control meeting for the academic year, interim provost **Stephen Bowen** reflected on the achievements of the faculty as Michigan Tech geared up for the change to semesters.

"In terms of development of new courses, curricula, and degree programs, the intensity of student advising, and the growth of scholarship, this unquestionably has been the most productive year in the history of Michigan Tech," Bowen said. He cited a number of innovations that will become part of the curriculum this fall.

Bowen singled out the common first-year engineering curriculum, developed under the leadership of **Sheryl Sorby** (director of general engineering), and particularly its coordination of what students study in math and engineering. He also cited the development of the Perspectives on Inquiry courses, led by **Marilyn Cooper** (Humanities) and **Bob Keen** (Biological Sciences). The faculty preparing the nearly 65 sections of this course have worked together to refine syllabi and develop parallel assignments for each section.

He also noted that the Engineering Enterprise program will begin full implementation this fall. Developed with the leadership of **Mark Plichta** (associate dean of engineering), 10 enterprise teams involving 180 students will combine special course work, project work, and team work as they simulate the development of technology-based commercial enterprises over a three-year period.

Bowen said the introduction of minors is another curriculum enhancement. Starting this fall, Michigan Tech will offer 36 different minors of 16 credit hours each.

The distance education program increased enrollment by 25 percent, with 551 registrations in existing courses. "Even more dramatic," Bowen pointed out, "has been growth of new distance education programs. With the leadership of Professors **Bill Shapton** and **Bill Predebon** (ME-EM), and **Marti Banks-Sikarskie**, director of Extended University Programs, we have developed a new pro-

gram to deliver the Design Engineering Certificate through distance learning to General Motors. We will begin with a pilot program involving a few hundred students next fall, but GM estimates they have 5,000 current employees who will need this certification sometime in the next five years."

Bowen credits those who provided academic advising as key players in the semester transition, as every student needed to develop a plan for the change. "Both the students and the faculty report that they enjoyed this interaction," he said, "and this encourages us to concentrate more on academic advising in the coming years."

In addition, the records and registration staff had to cope with processing 1,700 new courses, 20 new sets of degree requirements, and completion and coursework plans from 4,000 students. "Our **Office of Student Records and Registration** responded to this challenge with a combination of creativity and professional discipline that let us get through the year smoothly," Bowen said. "We are all grateful for their continuing commitment and willingness to go the extra mile."

At the same time, the same office implemented the new Web registration system.

In terms of research and graduate studies, acceptances to master's programs are up 27 percent for this coming fall, and those to PhD programs have increased 44 percent. Bowen cited three major research consortiums led by Michigan Tech faculty, including the Keweenaw Current (KITES) program led by **Sarah Green** (Chemistry), studies of high energy particle astrophysics led by **David Nitz** (Physics), and major research on greenhouse gases led by **David Karnosky** (SFWP).

"The faculty with whom I have spoken in the last month report equal measures of exhaustion and elation," Bowen said. "They are exhausted after an extremely intense year of teaching, research, planning new curricula, and advising students for semesters. But they are elated at the prospect and promise of the coming academic year and look forward to its realization."

New semester courses, the new engineering enterprise program, and new first-year programs are all ready for fall semester 2000.

Facilities, MUB Seek Student Workers

Facilities Operations has several student employment positions available in Custodial Services. Hours are from 7:00 am to 3:30 pm, Monday through Friday, and the pay rate is \$5.25 per hour. Applications are available from the facilities office on the waterfront or by calling **Diane Gilbert** at 7-2711.

The Memorial Union is looking for people 16-years-old and older to be part of a pool of temporary catering helpers. Temporary workers would be assigned a variety of duties which may include set-up, waitstaff, clean-up, and dishroom. Shifts are primarily evenings and weekends. Early shifts and days shifts are sometimes offered.

The MUB particularly needs workers for the Calumet All-School Reunion on July 20-21 and the Michigan Tech Alumni Reunion, August 3-5. Inquire in person at the MUB Kitchen Office between 8:00 am and 4:00 pm.

Library Announces New Reference Desk Hours

From July 1 through August 28, reference desk hours at the J. Robert Van Pelt Library are 9:00 am to 5:00 pm Monday through Friday. In addition, there are two ways to submit your questions to reference staff electronically. One way is to send your questions via e-mail to reflib@mtu.edu. The second way is to use the Reference Request Form accessible via the library's web page (select Library Forms, then Reference Request Form).

When visiting the library after 5:00 pm, you also have the option of filling out a paper form, available at the reference desk (in a green box). Fill out the form and place it within the green box. The staff will retrieve the submitted questions the next morning.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, *Tech Topics* editor

To get *Tech Topics* via e-mail, send a message to MAJORDOMO@MTU.EDU saying `SUBSCRIBE TECH-TOPICS-L`

Information to be included in *Tech Topics* should be submitted to the *Tech Topics* editor in one of the following ways:

- 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 5:00 p.m.** for publication the following Friday.

Department Displays, Open Houses Invited for Alumni Reunion

The Alumni Association invites departments to host open houses or provide displays during the 2000 Alumni Reunion, set for August 3-5. **Stephan Olsson**, executive director of alumni relations, says his organization is "targeting the period from 1:30 - 3:00 pm, Friday, August 4, as a time for alums to visit campus departments." Olsson asks that department chairs planning open houses contact him to coordinate publicity.

Theresa Coleman-Kaiser, assistant director of the Memorial Union, asks that department chairs contact her, as well. "This is a busy time for everyone, including our catering department," she says, "and we appreciate the opportunity to do some advance planning for food and staffing."

Olsson is also inviting groups and departments to consider preparing outdoor displays for the reunion's welcome tent, to be set up at the MUB. "This provides the entire campus community a great opportunity to highlight the programs and projects which are at the core of our institution," he said.

This year, registration and the welcome area will be at the Memorial Union, rather than the Meese Center. Registration will be inside the Memorial Union on the first level. You can request more information or a full schedule of events by e-mailing the Alumni Association at mtu_reunion@mtu.edu.

Campaign Publications Win Award

The Michigan Tech Fund's Leaders for Innovation Campaign materials have been awarded a 2000 APEX Award for Publications Excellence from Communications Concepts. The series of publications highlighted alumni, donors, faculty, and university initiatives.

Editors of the pieces were **Dennis Walikainen** and **John Gagnon**, and photography was by **Brian Parmeter**, all of University Relations.

The APEX awards are given annually by Communications Concepts of Springfield, Virginia, who reviewed some 4,900 entries.

Summer Hours for Performing Arts Tickets

The Performing Arts Ticket Center business hours have changed to 8:00 am - 4:00 pm, Monday through Friday, for the summer. Tickets are currently available for the summer season at the Calumet Theatre. These events include: The Coasters, Drifters, & Platters, Sheer Pandemonium, Sh-Boom, Guy Lombardo's Royal Canadians, and many more. For tickets, call 487-3200.

Food Festival Saturday

Daniell Heights will sponsor an international food festival this Saturday, July 15, from 11:30 am until 2:00 pm. The event will feature a variety of authentic international food (and some local food) cooked by Michigan Tech students from Sri Lanka, China, India, Pakistan, Thailand, and other countries. The festival will take place near 2012 Woodmar Drive (all the way up in the upper Heights). Plenty of parking is available. For more information call 483-8110.

Wellness Planning and Screening Scheduled

The Wellness Office is coordinating a blood pressure screening on Wednesday, July 26 from 10 am - 1 pm in the ROTC Gym, open to all Michigan Tech employees. There is also a Wellness Planning Group meeting on Thursday, July 20, in the HR conference room at noon.

The office also has a new Web site at <http://www.admin.mtu.edu/hro/wellness/wel12/mainwellness.htm>

New Staff

Eric Blough has joined the biological sciences staff as a laboratory supervisor. He was previously a postdoctoral fellow in the Department of Physiology and Biophysics at the University of Illinois at Chicago. Blough has also been a postdoctoral fellow at the University of Michigan's School of Medicine, in the Mental Health Research Institute. He has a BS in Biology from MTU, an MS from Southern Illinois University, and a PhD from Ohio State. Blough lives in Hubbell and enjoys most sports and outdoor activities.

Martin Tervo is the new senior design project coordinator for mechanical engineering-engineering mechanics. He comes to Michigan Tech from DaimlerChrysler, where he was a product engineer, and he has worked as the industrial education teacher at Jeffers High School. The 1990 Tech graduate, his wife Anita, and their four children, live in Calumet.

Tech Well-Represented at ASEE

A number of faculty members received awards and gave presentations at the annual American Society for Engineering Education (ASEE) meeting, June 18-21 in St. Louis, Missouri. Assistant professor **Sheila Grant** (Biomedical Engineering) attended as the recipient of the Michigan Tech ASEE New Engineering Educator Travel Award. Assistant professor **David Miller** (Chemical Engineering) was selected to participate in the National Effective Teaching Institute offered prior to the conference.

Assistant professor **Donna Michalek** (ME-EM) gave a presentation, "Implementing a Team Exam in Thermodynamics," on her proceedings paper. Associate professor **Ashok Goel** (Electrical & Computer Engineering) gave a presentation, "Research Experiences for Undergraduate Women Students in High-Speed Integrated Circuits," on a proceedings paper co-authored by professor **Martha Sloan** (Electrical & Computer engineering) and seven students.

Associate professor **Noel Schulz** (Electrical & Computer Engineering) gave a presentation, "Using Posters to Enhance Electrical Engineering Students' Communication Skills," that was co-authored by associate professor **Leonard Bohmann** (Electrical & Computer Engineering) and professor **Jon Soper** (Electrical & Computer Engineering).

Associate professor and chair **Kirk Schulz** (Chemical Engineering) and **Noel Schulz** gave a joint presentation, "Getting U.S. Undergraduates into Graduate School: Providing Information and Opportunities," on a proceedings paper. Kirk was also a session moderator for the session on "Chemical Engineering Instruction in the Future."

POSITIONS AVAILABLE AT MICHIGAN TECH

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

The following positions will be posted Friday, July 14, 2000, at 1:00 p.m. through noon, Friday, July 21, 2000, in the Human Resources Office.

Associate Director—University Career Center
Residence Hall Coordinator—Residence Life (Regular, full-time, ten-month position)
Secretary N3—Physics (UAW internal and external)
Office Assistant N5—Residential Services-Facilities
Custodian—Facilities (AFSCME internal only)

University employees are reminded to apply in writing prior to noon, Friday, July 10, 2000, 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.

MTU Notables

Dickie Selfe, director of technology-based instruction in the humanities department, has been elected to the College Section Steering Committee of the National Council of Teachers of English. The Council includes 77,000 individual and institutional members worldwide and is dedicated to improving the teaching and learning of English and the language arts at all levels of education.

In Print

James R. Baker (associate director of corporate relations and PhD student in environmental engineering), associate professor **James R. Mihelcic** (CEE) and **Elizabeth Shea** (Princeton University and former environmental engineering summer undergraduate research assistant) published a paper titled "Estimating Soil-Water Partition Coefficients

(Koc) for Persistent Organic Pollutants: Limitations of Correlations with Kow" in *Chemosphere*, Volume 41, pages 813-817, 2000.

Professor **David Karnosky** (SFWP) has co-authored a chapter in "Responses of Northern U.S. Forests to Environmental Change, Ecological Studies." The chapter is titled "Interacting Effects of Multiple Stresses on Growth and Physiological Processes in Northern Forest Trees."

The summer issue of the ACUTA Journal of Telecommunications in Higher Education (with the theme "Convergence: Dealing with Change") includes articles by vice provost for information technology **Jim Cross** ("Cybervandals: Fending Off Attacks") and information technology editor/analyst **Mick McKellar** ("The Conscripted Consultant"). Cross is also part of a panel of experts interviewed on the topic of "convergence."

Proposals in Progress

Investigators, their proposals, and their potential sponsors are

- **W. Charles Kerfoot** (Biological Sciences), "Biocomplexity and Aquatic Food Webs: Algal and Zooplankton Diversity Against a Backdrop of Human Stoichiometric Disturbances," NSF
- **Shu-Zu Lu** and **Angus Hellawell** (MSE), "Development of an Accurate Measurement Methodology for Diffusion Coefficients in Metallic Liquids," US DOE
- **Jiquan Chen** and **Kimberley Brosofske** (SFWP), "Regional Carbon Sequestration in the Upper Great Lakes States: Patching Ameriflux Data Gaps," US DOE
- **Chandrashekar Joshi**, **John Vucetich**, and **David Reed** (SFWP), "Impact of Long-Term Management Prescriptions on Levels of Genetic Diversity in Northern Hardwood Forests," National Hardwood Lumber Association
- **John Erickson** and **John Forsman** (SFWP), "A Study to Determine the Technical Feasibility of Replacing 2x4 Softwood with 2x3 Hardwood Truss Web Members," USFS Forest Products Laboratory
- **Yi Zhao** (ME-EM), "A Fundamental Study on Compatibility of FRP Reinforced Concrete," NSF
- **John Vucetich**, **Rolf Peterson** (SFWP), and **Tom Drummer** (Mathematical Sciences), "Population Dynamics of Moose in Northwestern Minnesota," Minnesota DNR
- **Jong Lee** (MSE), **John Jaszczak**, and **Ranindra Pandey** (Physics), "Colossal Magnetoresistance and Lattice Strain: A Multiscale Modeling Study," NSF
- **Jaroslav Drelich** (MSE), "MTU-MSU International Program on the Preparation of Self-Assembled Monolayers and Nanostructures on Solid Substrates," NSF
- **John Vucetich**, **Dana Richter** (SFWP), and **Thomas Waite** (Ohio State University), "Assessing Ecological Consequences of Low-Lignin and Fast-Growth Transgenic Aspen," USDA BRARGP
- **Charles Young** (GES), "Travel to Plan Environmental Geophysical Studies in Estonia," National Academies of Science
- **Klaus Weinmann** (ME-EM), "Closed Loop Control of Sheet Metal Forming—Implementation of Controlled Drawbread Penetration and Binder Force," NSF
- **Mahesh Gupta** (ME-EM) and **Faith Morrison** (Chemical Engineering), "Optimum Design of Extrusion Dies Using the Estimated Elongational Viscosity of Polymers," NSF
- **Judith Perlinger** (CEE), "Transformations of Polyhalogenated Aliphatic Compounds in Heterogeneous Systems," Michigan Space Grant Consortium
- **Gordon Parker** and **Bernie Bettig** (ME-EM), "Optimal Design of Smart Structures," AFOSR

