ITS Mission

The Information Technology Services unit at the University of Michigan-Flint is a team of professional staff committed to enhancing individual and organizational effectiveness through the use of information and computing technologies.
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About ITS
The Information Technology Services (ITS) department supports the technological needs of the University of Michigan-Flint. With the exception of the management team, each ITS staff member falls into one primary service unit within the department: Data Information Management, Desktop Computer Services, Mediated Classroom Services, Network Systems Support, Security Services, User Services and Web and Instructional Technology.

ITS Staff
ITS employs over sixty-five regular and student employees dedicated to serving the university. Student employees account for positions in the reception area, HelpDesk, and in each of the ITS service teams.

The Management Team provides the overall decision making and supervision for the department.

Scott Arnst, Director Information Technology Services
Kenneth Heiser, IT Manager
Harvey Sherman, Associate Director Information Technology Services

Data Information Management (DIM) maintains UM-Flint’s central administrative databases; regulates data security and integrity; develops custom applications to enhance central processes; and offers consulting services for design, development and implementation of non-centrally-operated databases.

Jennifer Daraiseh, Business Systems Analyst Intermediate
John Dittmer, Business Systems Analyst Intermediate
Cleatus Henderson, Business Systems Analyst
Scott Hoover, Business Systems Analyst Intermediate
Kelly Johnson, Business Systems Analyst Intermediate
Mark Mercado, Business Systems Analyst Intermediate
Steven Nofs, Database Administrator Lead

Desktop Computer Services (DCS) performs the installation and maintenance of all desktop computers and printers on campus, including software and connections from the workstations to the communication closets; and provides consultation and assistance on all computer-related purchases for the campus.

Brendon Beede, Desktop Support Specialist Associate
Dan Getty, Desktop Support Specialist Intermediate
Jason Gooding, Desktop Support Specialist Senior
Michael Daniels, Desktop Support Specialist Associate

The Helpdesk offers support and consultation via email, telephone and office hours; furnishes end user documentation for software and electronic processes supported by ITS; provides software training for faculty and staff; and staffs three public computer labs available to students, faculty and staff, including extended evening and weekend hours.

Mark Turnpaugh, Helpdesk Coordinator Associate
Dana Woolcock, Helpdesk Technician Associate

Mediated Classroom Services (MCS) engineers campus computer labs and mediated classrooms; maintains classroom equipment; provides training on supported equipment and evaluates customer satisfaction with instructional applications; maintains the ITS Technology Center for video production and multimedia assistance; provides CD/DVD duplication services; and oversees distribution of mobile
computer classrooms. In addition they work with facilities management to keep the furniture count in general classrooms consistent and coordinate the purchase and installation of replacement furniture.

Jason Lee, Media Consultant
Melissa Storch, Mediated Classroom Services Supervisor

Network Systems Support (NSS) develops and maintains the network and server infrastructure; administers access to the LAN, UNIX and Windows servers for academic computing; administers campus-wide communication software; maintains network software and print queues; engineers campus computer labs and classrooms; provides support for Blackboard, Portal, and Merit’s WAN; maintains a campus-wide backup system; and manages system security.

Charles Allen, Systems Administrator Intermediate
David Arnould, LAN Support Technician
Harrison Bacon, Systems Administrator Associate
Sidney Horton, Desktop Support Specialist Senior
Lynne Ihrig, Systems Administrator Associate
Cuong Lai, Systems Administrator Intermediate
Adam Robinson, Systems Administrator Associate
Erik Taipalus, LAN Administrator Intermediate
Josh Weber, Systems Administrator Associate

Security Services provides and supports UM-Flint’s information technology security; facilitates campus-wide incident response activities; and provides security assessments, consultations, and network scans.

Philip Erlenbeck, Data Security Analyst Associate
Laurel Marotta, Data Security Analyst Associate

User Services maintains six computer classrooms of various sizes and platforms for academic instruction; coordinates Security Awareness and Piracy Campaigns for students; and administers computing sales to students, faculty, and staff.

Erica Burns, Secretary Associate
Angela Lawrence, Administrative Specialist
Mark Turnpaugh, Helpdesk Coordinator Associate

Web Services provides design and HTML programming assistance and technical support for university web pages; provides instruction and support for creation and maintenance of departmental websites using the university content management system (CMS) and blogging system; and supports online collaboration such as SharePoint.

Tim Todd, Webmaster
Paul Woolcock, Web Software Developer

The Information Technology Services (ITS) department worked diligently to supply UM-Flint with the most advanced, efficient technology throughout the 2010-2011 academic year. New solutions were introduced while several other technologies were upgraded and even more investigated.

Year in Review
Implement Windows 7 campus wide and remove all instances of Windows XP:
ITS has made significant progress with upgrading all computers to Windows 7. At this time there are less than 200 computers still running Windows XP, and we plan to have them migrated by the end of December 2011.

**Design and configure a new larger server room on the 4th floor of WSW and expand the WSW 3174 open computer lab:**

ITS has created the new server room and has begun migrating servers from 3173 to the 4th floor. We cannot expand the 3174 until we remove all servers from 3173 which should be completed by the end of the calendar year. At that time we will start work on expanding the 3174 computer lab to accommodate more computers as well as a small wireless lounge where students can use their own laptops.

**Implement the new version of TeamSite as well as LiveSite for the campus website:**

ITS has completed the upgrade of TeamSite and has implemented LiveSite.

**Upgrade our SharePoint systems to SharePoint 2010:**

ITS has completed this upgrade.

**Implement two form factor authentication, for access to Internet Native Banner:**

Our initial investigation indicated that we would need to purchase an expensive software package from Oracle, so we needed to look for alternatives. We have found one that we believe will work and have started testing it. We also plan on including this goal in our larger goal of creating a single sign-on system similar to the one Ann Arbor uses for Wolverine Access.

**Data Information Management**

ITS worked closely with OEL to implement an online evaluation product called Course Eval. The new evaluation system allows students to fill out the evaluation at their leisure rather than on the spot.
during finals. The compiled results are available to faculty in days rather than the months it took with the old paper system.

Advisor Tools- Advisor tools is a program that DIM wrote to assist advisors. Information which used to be accessed one page at a time is now available in one location which has streamlined the advising process.

Mcard swipes have been added to speed up the business processes in several departments (Advising, Registrars, Financial Aid, and Cashiers). A student can now swipe their Mcard and all pertinent information is displayed on the computer monitor.

The implementation of Clean Address has made it possible to identify erroneous entries and either fix them or delete them.

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**Overall Satisfaction with DIM**

- Very Dissatisfied: 0%
- Dissatisfied: 2%
- Neutral: 9%
- Satisfied: 89%
- Very Satisfied: 0%
DCS met with Housing Staff to set up the times that a DCS technician would be placed in Housing to assist new and returning student connecting to the University wired and wireless networks.

All four DCS technicians went through Dell Certification. They now all can complete Dell warranty repairs for Faculty, Staff and Students.

DCS technicians were on hand and on call during a Webcast by FINAID and for Regents meeting, assuring that the events were smooth and uninterrupted.

DCS implemented BitLocker for laptop security for Faculty and Staff. As per Ann Arbor, all university laptops much have Bit-Locker encryptions enabled. This requires each user to have a unique pin number that grants them access to the laptop and ensures data is secure in case the equipment is lost or stolen.

**Overall Satisfaction with DCS**

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Dissatisfied</td>
<td>0%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>0%</td>
</tr>
<tr>
<td>Neutral</td>
<td>0%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>79%</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>13%</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>92%</td>
</tr>
</tbody>
</table>
ITS has extended the Helpdesk hours in 206 MSB to 6am-1am Monday-Friday to accommodate more students.

ITS worked with Academic Advising so they could utilize 206 MSB lab throughout the spring and summer for orientation for new students.

New chairs were purchased for the 206 MSB lab.

Computers were upgraded in 206 MSB, 501 and 507 MSB and they were upgraded to Windows 7 operating system.

The ITS Helpdesk received approximately 18,000 work tickets this fiscal year.

**Overall Satisfaction with Helpdesk**

![Pie chart showing overall satisfaction with Helpdesk]

1% Very Dissatisfied 1% Dissatisfied 2% Neutral 11% Satisfied 85% Very Satisfied
Mediated Classroom Services

MCS agreed to record the Critical Issues Forums for UREL. This was a 5 session event. Each session’s setup consisted of 2 HD cameras and an audio feed from the hired audio company. We then transferred the sessions to DVD.

MCS started upgrading the BIO Lab. Each lab will have a new model document camera and ceiling mounted Epson projectors installed by MCS.

ITS replaced the FH document cameras. The new document camera will provide a better image, more control and are easier to use and requires less maintenance than the previous document cameras.

Due to the overwhelming amount of laptop card orders in 2009-2010, MCS received an additional 30 laptops to create a 4th laptop cart. The 4th cart lightened the consistent use of the other 3 carts and allowed more laptop cart orders do be fulfilled.

Overall Satisfaction with MCS

100%

Very Dissatisfied  Dissatisfied  Neutral  Satisfied  Very Satisfied
Network Systems Support

BAYU, or Be Aware You’re Uploading, is a service that was implemented on the UM-Flint campus to notify network users via email when they appear to be uploading data to the Internet using peer-to-peer (P2P) file-sharing technologies. This situation can put users at risk, especially if they are not aware that they are uploading, because they may inadvertently be sharing copyrighted materials. For users that might be knowingly engaging in sharing of copyrighted materials, receiving a BAYU notification email can help inform the user that their activity is being noticed so they can take appropriate corrective action to stop their activities. This service was rolled out in 2010 in conjunction with an educational campaign of emails and live presentation sessions explaining the service to users. Users were assured that this is being offered as an informative and protective service and should not be perceived in a negative light as an accusation or implication that they may have done something wrong, especially given the fact that there are a number of legitimate uses for P2P file sharing technologies. Many BAYU notifications have since been triggered by the monitoring system and users have been informed of the apparent activity. In some cases, users were unaware that file-sharing software had been installed on a computer shared with others, and ITS was able to assist the users in removing the unwanted software and the potential threat in represented for the user.

ITS upgraded Faculty and Staff email. We now provide a more robust email system with significant improvement in available space, speed, redundancy and reliability.

Two new Juniper SRX firewalls were added last year to bolster our existing internal and external firewall systems, and to allow us to begin to transition to newer firewall technology. These firewalls are also a key part of the strategy to add further redundancy and reliability to the network by allowing us to connect to multiple Internet connections so that we have a backup if one should fail.
ITS Security Services deployed credential roaming email encryption certificates to make email encryption easier to use for UM-Flint faculty and staff.

ITS Security Services replaced the old, outdated Virtual Private Network (VPN) with a new VPN. The VPN allows UM-Flint campus members secure access to their Remote Desktop, network drives, and email, as
well as other applications. Another advantage of the new VPN is that it can be accessed from computers running Windows, as well as Linux or Mac operating systems.

ITS Security Services worked with Network Systems Support to replace the campus firewall with a new firewall to improve network security.
Sales of various technology related products and services provided ITS an additional $115,000 this year. Our primary source of this additional funding comes from software sales, which includes products such as Microsoft Office 2010 for Windows and Microsoft Office 2011 for MAC’s, Microsoft Windows 7 32 & 64 bit, and Adobe Creative Suite that are up to eighty percent off retail prices. For example, Microsoft Windows 7 for sells in store for $199.99 and ITS sells it for only twenty dollars! Another large portion of ITS revenue comes from printing. After depleting the allotted 320 pages per semester, students and departments are able to purchase additional pages. This year additional printing revenue totaled $22,147 which helped cover the cost of expenses related to the printers, such as paper and toner.

Other revenue for 2010-2011 included $2,445 for Dell Warranty work, $1,890 for Alumni accounts and $97 for storage media. ITS also receives funds from departments to compensate for servers and web hosting which this year ended with a total of approximately $6,907.72.
SharePoint 2010 is the most recent version of Microsoft's collaboration and content management software. In addition to vast improvements to SharePoint's existing feature set, SharePoint 2010 brings increased interoperability with other Microsoft products, including the Office suite, Exchange email, and the Lync communication platform. SharePoint 2010 also adds all new Business Intelligence capabilities, including ways to incorporate data from non-Microsoft products, and new ways to organize, aggregate, and display data from all aspects of an organization. Finally, new collaboration tools like Wikis, threaded discussions, and more powerful workflows have been added. Brown Bag sessions covering the new features of SharePoint 2010 were held and the slides from the presentations are still available at http://www.umflint.edu/sharepoint2010. Training sessions were held on May 18th, 19th, and 20th 2011. SharePoint 2010 went live on May 23rd 2010.

The implementation of LiveSite leverages TeamSite's centralized infrastructure and content management capabilities and makes it easier for non-technical users to contribute content and manage the online experience. LiveSite compliments and extends TeamSite with enhanced multi-site management and content contribution capabilities for departments. A reusable component based architecture enables powerful drag-and-drop assembly for efficient page management as well as in-context editing for intuitive, point-and-click page editing. A Brown Bag was given introducing the campus to LiveSite prior to and after implementation of LiveSite to keep the campus up to date with the progress.
ITS implemented an API/Acalog for the online course catalog, this allows the student catalog to be updated dynamically. The Acalog API allows us to programmatically pull information out of the Acalog Course Catalog. We can use this to include catalog information on non-Catalog web pages. I implemented a layer on top of the Acalog API that allows our users to interact with the Acalog API through the CMS without having to deal with any of the underlying system.

A new Helpdesk website was implemented which allowed Helpdesk employees to easily maintain and update Quicknotes, as well as making the site more user-friendly.

### Overall Satisfaction with WEB

- **Very Dissatisfied**: 1%
- **Dissatisfied**: 1%
- **Neutral**: 2%
- **Satisfied**: 14%
- **Very Satisfied**: 84%

**Management Team**
Supporting the Community

Martin Luther King Jr. Day of Service – January 17th 2011.
Several ITS staff spent the day volunteering at local sites including the North End Soup Kitchen and Adopt-A-Pet in Fenton. Participants experienced a diversity of ways to lend a hand to others – human and not – on this day of celebration, recognition and service.

Looking Ahead

- Continue to meet the technological demands of UM-Flint while concentrating on customer service
- Seek central funding to implement an off-site disaster recovery solution for critical systems for our students and employees, these include Banner/Student Information System, Imagenow/Webnow, student and employee email, and I and H drives for employees and students. In addition, we will work with OEL to include Blackboard in an off-site solution.
- Complete the purchase and implementation of a Customer Relationship Management system in direct support of the campus strategic plan. With this product the campus should be better able to coordinate communications with its constituents and make a more personal connection with prospective and current students. In addition, this product should better enable retention of students that are academically at risk by allowing advisors and faculty advisors to intervene in a more timely manner.
- Move our credit card payment processing system, Touchnet, to an off-site, vendor hosted solution. As the Data Security Standards (DSS) requirements of the Payment Card Industry (PCI) have become increasingly complex, the entire University of Michigan has moved away from hosting any credit card processing on any campus. In order to maintain a certain level of customer satisfaction, this campus has continued to process credit cards internally.

Overall Satisfaction with ITS

- Very Dissatisfied: 1%
- Dissatisfied: 1%
- Neutral: 2%
- Satisfied: 15%
- Very Satisfied: 81%
Unfortunately we can no longer meet the requirements and must move the processing of credit cards to an external vendor.

- Complete testing and implement mobile device access for Student Information System so that students can access registration, grades, and other information in SIS from anywhere on their handheld devices.
- Fully commit to a virtual desktop infrastructure (VDI) to lower capital and operation expenditures for not only computer labs but for campus departments as well. We have begun piloting VDI in the French Hall 205 lab with just 40 machines. This goal should allow the University to spend less money at the time of purchase when purchasing new computers and in addition these machines use significantly less energy than a traditional desktop. Based on our calculations by switching from traditional desktops to VDI in the FH205 lab should annually save the University $1,700 just in reduced energy consumption and reduced cooling.