



Information Technology Master Plan





**INFORMATION TECHNOLOGY
MASTER PLAN
2016**

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TABLE OF CONTENTS

I. Executive Summary	3
II. Introduction	4
III. Planning Assumptions	11
IV. Strategies	14
V. IT Goals and Objectives	21
VI. Strategic Objectives	24
VII. Appendix	29

I. Executive Summary

Overview

The Technology Master Plan (TMP) is intended to integrate with all institutional planning as well as integrate into the Educational Master Plan (EMP) and the Facilities Master Plan (FMP). Information Technology (IT) is an integrated function of the College and it is important that the TMP embody this integration and allow for an evaluative component.

Prior to 2008, Information Technology services were viewed from a fragmented perspective in higher education. Previously there was a segment of IT that was viewed as the technical staff that focused on evaluation, purchasing, implementation, and support of academic and instructional technologies. This included classroom technology, computer labs, libraries, and learning resource centers. This area was considered a distinct technology segment that was self-contained and isolated from other critical Mt. SAC technologies and systems.

Other College technologies and systems included the administrative systems that processed student registration, produced class rolls, maintained student information, grades and academic history, and supported student services such as counseling, advising and degree/certificate checking. Additional administrative systems included human resource recruitment, employee data systems, payroll processing systems, and sometimes management reporting and state/federal mandated reporting. All of these systems were viewed as self-contained environments with no need for any access or connection to the academic and instructional technologies at Mt. SAC.

While this fragmented view of technology gave a relatively clear division of management and staff duties, it also made it difficult or impossible to have a complete picture of the College's position and success in meeting its mission. There were critical systems and data in both the instructional and administrative environments but the connection between these two environments could not be achieved. Both sides suffered from a lack of integrated data that could better serve students, faculty, staff, and administrators, and hence, allow a holistic vision of the College's ability and needs in relation to instruction and learning. In particular, services to students were difficult to deliver as student data was not centralized. As such, data had to be entered many times into many disconnected systems with a high probability of incorrect data or data that was out of sync between the different systems.

Over time it became clear that technology, and more importantly, data was being imbedded in disparate systems throughout the College. Diverse technologies entered into the College from many paths and sometimes in unexpected ways. It was becoming obvious that a consolidated strategy to implement and manage technology across the College was required to use technology successfully and, as important, to leverage success from the ever growing investment the College was making in technology. Technology and related ongoing support and costs had to be viewed in the whole to manage the College responsibly from a fiscal perspective and ensure the required primary focus on instruction and learning.

II. Introduction

Mission Statement

The Information Technology (IT) team provides service and support to the students, faculty, and staff of Mt. San Antonio College by providing leadership in the implementation, integration, application, delivery, and support of information and instructional technologies. The IT team is committed to efficiently and effectively manage communication, academic and administrative computing, network services, web services, printing services, mail services, and related information resources that support and enhance teaching, learning, community development, and public service at the College.

Vision Statement

In order to fulfill its mission, IT is committed to the following responsibilities:

- To provide technology resources to support student learning programs and services and improve institutional effectiveness
- To deliver prompt, courteous service to all clients
- To direct IT planning at the institutional level and provide leadership, partnership, and support to divisions and departments within the College to ensure the appropriate implementation and application of technology
- To collegially establish, communicate and enforce standards for the use and delivery of information and educational technology
- To facilitate and encourage the use of information technologies within the College
- To maintain the mechanisms for appropriate information technology access, security, availability, and integrity
- To manage the physical infrastructure in support of IT, assuring the reliability and availability to meet current and future requirements
- To identify, implement, and manage institutional databases as a College resource
- To evaluate and enhance the effectiveness of IT resources including human, physical, and financial resources
- To research and evaluate emerging technologies and to implement and integrate new technology as appropriate
- To educate and train the College Community in the use and application of information and educational technology through consultation and instruction
- To focus on current and evolving communication technologies to enhance communications with students, faculty and the community while supporting the College commitment to excellence in student learning
- To represent and act as advocate for the College Community at the local, state, national and international level
- To maintain an open dialogue with campus faculty, academic and Student Services to ensure full support for student learning and support of the College in fulfilling the stated mission.
- To provide training in all areas of technology that benefit students, faculty, and staff
- To continue to work with all other campus groups on planning for IT requirements throughout all levels of the College through both formal and informal processes
- To use educational technology to provide faculty more flexibility in the method of delivery of instruction and instructional material

SWOT Analysis

Strengths

- The largest single campus community college in the State
- A dedicated and skilled staff committed to providing outstanding service and support to the College's students, faculty and staff
- A commitment by College Senior Management to provide the latest technology for faculty
- Fiber Optic based infrastructure and campus network expansion to 10 gigabit bandwidth and beyond
- Addition of IP based communications to the College voice network
- Banner EAS including the Luminis Portal and related supporting technologies and systems
- Strong academic programs that emphasize information technology
- A strong vision to be a premier community college, a leader in teaching, learning, programs and service, provide access to quality education, focusing on student success within a climate of integrity and respect and To consistently exceed expectations of our students, staff and community
- Effective at creating partnerships
- Outstanding regional and national reputation and relationships
- Resourceful within context of campus politics/limited budget
- Strong intra-campus relationships
- Shared governance

Weaknesses

- Overall staff size needs to be aligned with campus growth and evolving business processes that may change due to technology implementations
- Budgetary limits
- Investment in technology requires increasingly limited fiscal resources for acquisition and, more importantly, on-going maintenance and support
- Recruitment and retention of qualified technical staff
- New facilities (new infrastructure)
- Staff training for software and other technologies is limited due to budgetary constraints
- Plan to co-locate technical staff with users in order to provide improved support requires dedicated space be allocated in user department which is in short supply
- Provide infrastructure and support for the multitude of WIFI enabled devices on campus
- Ability to support the proliferation of wireless mobile devices campus wide
- Staff space for IT is currently constrained in the existing building, remodel is in process for additional space

SWOT Analysis continued

Opportunities

- New ways to deliver instruction are continually and rapidly evolving
- Continued ability to reach students in many ways other than the traditional classroom setting
- Student and faculty access to information and learning materials from on and off campus using computers, hand-held devices, and other technologies
- Make the Internet and the Web the primary communication links and user interfaces
- Information systems coupled to the Web are changing many of our business processes with the potential of making them more effective and efficient
- Distance Learning will require new methods of delivering student support services remotely
- New methods of communication among the campus constituents will raise issues of access, security, and privacy
- Expand student learning experience – provide infrastructure
- Research technology support (high speed networks/graphics tools/storage)
- High Speed network with video gear (conferencing capability)
- Anywhere/anytime systems
- Provide additional technology solutions and resources through Cloud computing
- Desktop virtualization for staff and faculty computing

Threats

- Fluctuating fiscal environment
- Ability to recruit and retain technically skilled staff
- Vocational Tech Ed Schools – For profit, stronger on line learning, no compliance issues with government mandates
- State regulations
- Natural disasters
- Computer viruses and related malware
- Security issues from Phishing schemes
- Security breaches and hacks
- Increase in the number of computing devices to be supported
- Lack of organized training opportunities for IT staff in desktop/server support roles

Objectives of Technology Master Plan

In order to accomplish the mission and vision statements listed, Mt San Antonio College requires a comprehensive plan for information and instructional technology. A major goal of this plan is for Mt. SAC to continue to be a leader in the use of information technology in higher education. This is important in supporting the mission of the College and also important to the commitment for Mt. SAC to be recognized as one of California's very best community colleges. It is clear that the College will continue to embrace emerging technologies that are critical to the College mission:

- New ways to deliver instruction that are continually and rapidly evolving
- Continued need to reach students in a variety of ways other than the traditional classroom setting
- Students and faculty access to information and learning materials from on and off campus using computers, hand held devices and other technologies
- The Internet and the Web as primary communication links and user interfaces
- Information systems coupled to the Web change many college business processes with the potential of making them more effective and efficient
- Distance Learning requiring new methods of delivering student support services remotely
- New methods of communication among the campus constituents raising issues of access, security, and privacy
- Providing services, support, facilities, hardware and software that are designed to enhance the operations and effectiveness of the College
- Providing quality technical to students, faculty, and other College personnel

Continuing to utilize a process for planning, acquisition, maintenance, and upgrades of the technology infrastructure to meet current and future College requirements. This plan will not be just a plan for the Information Technology team but rather a plan for information and educational technology for the entire College. Full implementation of this plan will require that much of the activity and funding take place at the division and departmental level. This is consistent with the distributed nature of information technology.

It is recognized that technology requires significant ongoing expenditures and, as such, must be managed with care and viewed in light of other critical College needs. The major focus of this plan is on the design, development, and application of information and educational technology in support of teaching and learning, service, and the conduct of College business.

Objectives of Technology Master Plan (continued)

Information Technology is now a fundamental part of Mt. SAC and all its constituency. Given the importance of technology in teaching and learning it is a requirement that careful planning and analysis related to the overall cost of technology be conducted on an ongoing basis. This includes not only one time purchase costs but also maintenance, on-going replacement and support costs (including training), that must be built into the budgeting of all units of the College. This applies to all components of technology:

- Desktop, laptop computers and related peripheral equipment for faculty, staff, and students
- Classroom presentation equipment
- EAS (Banner) and all related support technology and systems
- Other distributed systems (e.g. imaging systems)

A related issue, which also has fiscal implications, is our ability to recruit and retain the technical staff needed to support information and educational technology in academic and administrative departments. It is important to recognize that the information and educational technology function depends upon the skills of technical staff, and that those skills are in high demand locally and throughout the State.

Therefore, ongoing investment in technology is a critical requirement for Mt. SAC to continue to supply exemplary programs and services to its students, faculty, staff and community constituents. However, such investments in technology must be accompanied by appropriate investments in related technology training and professional development opportunities. In fact, Mt. SAC must have a strong commitment and requirement for professional development in support of all campus technologies. The following training and professional development activities are highlighted and included as an action item in this master plan:

- Classroom technology as well as learning management systems for faculty use in an online or hybrid teaching environment
- Administrative Systems to manage all areas of the College's business processing
- Collection of critical data and use of this data for reporting and support of business management decisions
- Staff productivity using desktop technology tools such as Microsoft Office and the opportunity to learn advanced software functionality
- Web development tools like OmniUpdate for distributed web content updates
- A wide variety of communication tools – email, instant messaging, and streaming video

The Mt. San Antonio College Technology Master Plan advocates and supports the College's ongoing investment of resources and funding for technology training and professional development. The College must adhere to this commitment and ensure coordinated planning in this regard for current and emerging campus technologies.

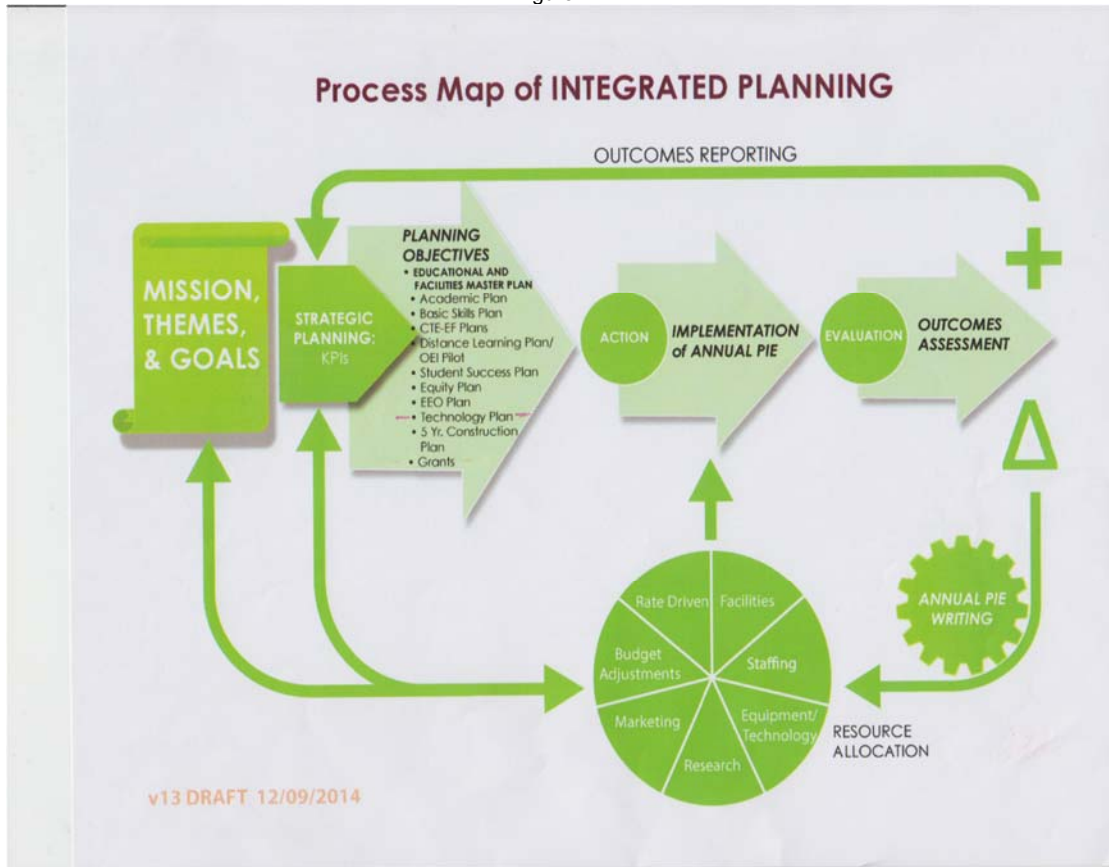
Mt. SAC continues to build a foundation for a 'state-of-the-art' infrastructure for many years. This infrastructure is critical not only to support current, emerging and future technology for instruction and learning but also is required for support of administrative systems, facilities systems and day to day operations of the College. Sound fiscal planning will be required in order to assure the maintenance of this infrastructure at 'state-of-the-art' levels. The related fiscal planning should include ongoing investment and life-cycle replacement College-wide - throughout all academic and administrative divisions and departments.

Aligning IT Goals with Institutional Mission

In order for this Information Technology Master Plan to be an effective tool for directing the acquisition and use of information technology for the institution, it must be aligned with the overall planning efforts of Mt. SAC. In addition, Mt. SAC and the California Community Colleges have directives that must also be part of the alignment.

The Technology Master Plan is aligned with the overall College Plan through a Comprehensive Planning Process (see Figure 1-1). This plan specifically integrates with the Educational Master Plan and Facilities Master Plan processes.

Figure 1-1



Integration of Technology Master Plan into College Integrated Planning

III. Planning Assumptions

A. General

- Centralize and integrate services for students and faculty such as Banner, Luminis portal and all related enterprise technologies
- Increase single sign-on features to access these services
- Increased usage of email, mobile technology and advanced communications
- Online services such as counseling, learning management systems, student services, etc. will require that the technology infrastructure stay up-to-date and expand as required
- Separate data information warehouses will need to be integrated into a centralized database system to reduce information redundancy and increase the accuracy of the information
- Technology refresh of computers and software based on a 3 to 5 year schedule as appropriate and reasonable based on available funding
- Academic IT support staff will have space adjacent to users: faculty, students and labs
- Implementation of systems to support applications for students and faculty requires proper data center facilities
- Possible use of outside hosted ("cloud") systems for applications as is appropriate and cost-effective

B. Students

- Increased enrollment will increase the need for technology efficiency and effectiveness
- Total Enrollment Summary Projections. The College plans to continue modest FTES growth as the CA budget becomes healthier.
 - College's enrollment plan includes growing FTES by approximately 4%.
- Increase in facilities space and staff for Student Services will require that IT infrastructure is able to meet needs
- Expansion of computerized testing services in order to expedite assessment and matriculation process
- As technology for persons with disabilities continues to improve, the result will be an increased need to keep up with the latest technology based on available funding

C. Academic (Teaching/Learning)

- Implementation of "smart" classroom technologies with increasing reliance on access to networks based on available funding
- Expand Mt. SAC Help Desk support to align with Instructional needs. This will require addition funds for staffing (See Appendix Section B References - Help Desk coverage expansion plan)

Planning Assumptions continued

D. Administrative

- Planned new facilities, estimated at 25% by 2020, will require new IT infrastructure based on the College's ability to raise funds via Measure RR bonds. This assumption is based on review of new Facilities Master Plan.
- Planned remodels will require new IT infrastructure
- Implementation of new maintenance systems including successful implementation of SchoolDude and planned implementation RTA Fleet Management
- Ongoing implementation of Banner systems and related technology
- Document Imaging storage system, OnBase, to replace paper storage
- The College continues to work towards uniformity and consolidation of centrally funded copiers. The College has received favorable pricing as the maintenance agreements are consolidated. IT will continue to pursue uniformity in all new copier purchases.
- Implementation by August 2015 of a direct online supply ordering program would allow individual departments to directly order their office supply items from a vendor. This would replace a cumbersome and time-consuming process for many low dollar purchases. In addition, a plan to implement a controlled and secure purchasing card with limits would possibly eliminate 40 to 60% of low dollar POs
- A web-based bid program would be responsive to modern procurement practices implemented in private industry, and increasingly, in the public sector
- Consolidation of technology training, including Banner, Omniupdate, etc, the , creation/maintenance of training materials and tight integration with Help Desk functions
- With the national Campus Emergency Response Act (HR 5735), IT will be required to support ongoing access to mass emergency notification systems for life threatening emergency situations. This can also be used for non-emergency issues such as campus and building closures. Other technology options include integration with Safety & Security Devices, call and campus broadcast systems (indoor/outdoor). Completed system includes web, phone, cell, e-mail and marquis across campus

E. Fiscal

- Fluctuating economic conditions continue to provide challenges; however, it is estimated that some level of increase in funding for ongoing operations

Planning Assumptions continued

F. Information Technology

- Greater integration of data SILO's into central Data Warehouse
- Banner – On an ongoing basis, power Users will be trained in order to support and train individual departments on applications
- Remodel of IT building by 2016 will create additional space for staff
- The College is well into an ongoing implementation of new technology, systems and communications tools
- New integrated EAS system covering student registration, student services, ed plan/degree audit, class scheduling, faculty services, employee services, budgeting and finance, purchasing, human resources and payroll
- As the College grows, there will be additional demand for increased technology and technology support services
- Significant staff training/development is required on an ongoing basis
- Significant analysis and changes to existing business processes is critical
- Future methods to provide services will be via the campus portal to specifically target campus/community populations with communications and relevant content
- Utilization of a wide variety of tools and formats (i.e., messaging, audio/podcasts, video, etc.) is also envisioned
- Increased demand for new and emerging technologies will require increased data storage, handheld/web-enabled technologies, and authentication/targeted technology services and delivery are required
- Ongoing infrastructure/network upgrades must be scheduled/completed
- IT office/work space for academic support staff should be located on campus near the constituents they support
- There is a need for centrally located storage space to house required equipment and parts for easy retrieval
- By 2016, the Department will need 1 additional manager, 1 supervisor, and 2 full-time classified staff
- By 2020 (after a Library addition is completed), additional personnel will be needed and it is estimated that 3 full-time classified staff will be required
- By 2025, 3 additional full-time classified staff will be needed
- Projected needs assume decentralized space for IT academic support staff as required
- Continue to participate in AUO and SLO process via PIE
- Plans for Virtual Desktop Infrastructure (VDI) - Technology plan supports moving toward, current Bus Labs and future expansion is expected
- Campus wide non lab computer refresh has been in place for number of years. Due to budget constraints and funding restrictions, the technology plan allows for restoration of refresh based on levels of state funding

IV. Strategies

1. Student Services

- Improve College-wide communications capabilities through use of an integrated, web based systems (Luminis, Web, Cloud storage, Banner, etc)
- Move to technology delivery of services
- Online counseling
- Need to ensure ongoing technology training for the existing staff and ensure that technology awareness is part of the new hire process
- Issue with how to measure how well technology is being delivered (success/failure)
- Some online use of Learning Management Systems
- Automated self-service and counselor assisted educational planning, degree audit and 'what if' planning for student success. Also, single calendar of events to improve communication of events such as meetings, workshops and presentations
- Mobile apps for higher education aim to integrate mobile devices, such as smartphones and tablets, with academic courses and other student support services in order to facilitate learning outcomes and student success. Through these applications, the college can look to offer students options such as the ability to manage and take classes, receive additional instructions or information from instructors, download class resources, jot down and manage notes, manage classmate contact list, participate in university polls, and read announcements (see Section B. References Internal White Paper related to Mobile Applications)
- Cost issues with the desire to maintain an appropriate ratio of students to staff and to supply a high level of services to students
- Improve security to address stolen equipment
- Scholarship information updates and shared information to students
- Additional space for bridge, career and transfer services, counseling, DSPS, EOPS/Care/CalWORKs, financial aid, health center(mobile site west side of campus), high school outreach

2. Academic Systems

- Improve College-wide communications capabilities through use of an integrated, web based system (Luminis, web. Cloud storage, Banner, etc)
- Faculty Web Services offering:
 - Access to On-line rosters
 - Student drops
 - Faculty schedule
 - Submission of grades
 - Automated Wait Lists
 - Learning Management System certified teaching faculty can directly access their on-line classes
 - Luminis Course Studio connected to every class section where faculty can manage class documents, post links, facilitate class interaction and keep students engaged in all aspects of the class
 - Expanded features in faculty referral of students based on early alert, early progress: template language to refer students to interventions, customizable messages to students, and feedback loop to services referred
- Student Web Services offering:
 - Luminis portal online student services
 - Mobile apps supplementing Luminis portal online student services
 - Learning Management System supporting rigorous online teaching and increased class offerings
 - Learning Management System supporting hybrid class offerings
 - Luminis Course Studio connected to every class section where students and faculty can manage class documents, post links, facilitate class interaction, and keep students engaged in all aspects of the class
- Gather student and faculty feedback on technology tools for teaching/learning for needs assessment and effectiveness assessment (accreditation).
- Just in Time (JIT) support for classrooms: problem solving to minimize equipment down time in classrooms, library, and labs. Have ready-to-go temporary computers for swapping out equipment that needs repair or service to minimize disruption of teaching/learning.
- Support “vanilla” faculty desktop configuration across the networks so that faculty could access their course content and materials irrespective of their classroom assignment (maximizes classroom utilization unless specialized classrooms need to stay specialized, e.g., welding, nursing, chemistry)
- Implement automatic availability of all courses into Moodlerooms to maximize use of MR and to have backup for maintaining instruction in a catastrophic event such as a major earthquake
- Direct assistance to students
- Direct, regular, on-going, involvement and communication with instructional leaders
- Determine team priorities by direct involvement and communication with faculty
- IT Technology Support staff distributed on campus with users in order to build relationships
- Feedback from meetings as part of IT on-going evaluation and assessment process
- Continue development of IT related standards documents
- Determine team priorities by direct involvement and communication with faculty and staff

- Continue to meet with academic departments to ensure that student input into technology needs is being recognized and communicated so that it can be effectively addressed by IT
- Periodic communication/info update to campus community on software upgrades (what to do, what not to do, and why), e.g., don't upgrade Java or keep Java at the current version, browser compatibility with current tools (e.g., Argos works best using IE)
- Support implementation of CourseLeaf for online catalog and exploration of curriculum management tool to replace WebCMS and to seamlessly push content into CourseLeaf.
- Support implementation of TracDat 5 for documenting outcomes for reporting and accreditation and for its integration into PIE forms as appropriate (e.g., Strategic Objectives from the College Strategic Plan 2014-15)
- Automatically generate and then push reports to users for routine statistics about course enrollment and other ongoing, routine data requirements. This data will be available to deans/associate deans; and should be available for department chairs.
- Explore implications of adopting Canvas as a pilot college in the Online Education Initiative in the next two years (at no cost for the LMS, but there will be cost in human resources to support the implementation while still maintaining Moodlerooms in the systems transition).

3. Library Services

- Cloud-based library management system to allow students to discover and access resources from Mt SAC collections including books, articles, eBooks, films and DVDs, reserves, audiobooks, and periodicals as well as identifying items for students in neighboring libraries that have collaborative lending arrangements (Implemented OCLC Worldshare Management System August 1, 2013.)
- Online References services to support distance learning students and provide students with remote access to library reference services. (Library pays for QuestionPoint Service)
- Computers in adequate numbers in the library to ensure that students are able to access library research materials, have up-to-date hardware to use all types of software to complete assignments, and connect to the online learning system such as Moodlerooms.
- Software to support student self-service, web-based scheduling for library workshops and provide automated proof of completion certificates. (eSARS)
- Software to support student self-service, web-based scheduling to book group study rooms. (Library pays for and uses Springshare LibCal)
- Online delivery of library workshops for distance learning students and students needing remote access to library instruction. (Library plans to use Moodlerooms)
- Purchase a front counter scheduling software system that links to a budget and includes a reporting system that might include number of contacts or attendees.
- Reference Desk scheduling
- Workshop scheduling
- Maintaining an appropriate ratio of students to technology support staff to supply a high level of services to students that would include print services and assistance with student-owned devices.
- Create a walk-in technology lab that provides printing services, software and formatting assistance needed to produce high-quality documents and assist with technology-related questions.
- Printing services with a broad range of services such as two-sided printing, color printing, and wireless and internet printing with various payment options (The library uses QCI)
- Program Banner to notify students through automatic email notification of recently placed library holds to ensure that the student is aware of their obligations to the library (this will be a Banner Enhancement Request.)
- WIFI with enough bandwidth to support student owned smartphones, laptops, tablets, and other mobile devices to facilitate access to library resources including printing processes (a new building is needed; the current building is maxed out.)
- Purchase/install a public announcement system to ensure students in study rooms and all corners of the library hear library closing and emergency announcements. Currently, the library staff often one person at night uses her voice to do the regular announcements, but her voice cannot reach all areas of

the library (the library used to have a public announcement system, but it went away after the building renovation at least 15 years ago.)

4. Administrative Systems

- IT Technology Support staff distributed on campus with users in order to build relationships
- Assist Help Desk callers via online, phone, “Walk Ins” and onsite dispatch
- Desktop computing 3-5 year refresh cycle with standard configurations and ongoing maintenance and upgrades of hardware and software based on available and appropriate funding
- Networks and telecommunications installed, upgraded and maintained using standards and regular, ongoing maintenance of related critical hardware and software systems
- IT security maintained by using “best practices”, standards, auditing, use of a Disaster Recovery Plan and ongoing awareness programs offered to campus staff and faculty
- Provide services to College for acquisition of technology and maintain involvement with institutional leadership and ongoing evaluations and assessments
- Printing Services offer goal of 24 hour turn around, online submissions and design assistance for “best use” of equipment
- Mail Services provides up to twice a day pick up and processing, mass mailings as appropriate
- Construction support services include standards documents for development and maintenance of IT related areas, regular involvement with construction personnel and the knowledge that technology is a priority in the construction process (See Appendix Section B Information Technology Infrastructure Standards)
- Via the Administrative Systems Advisory Group, engage all college constituent groups in leveraging Banner and related technologies for staff efficiencies, student and faculty support and success
- Continue to partner with other CA Community Colleges and the CA Community College Banner Solution Center to develop specifications for Banner CALB enhancements
- Improve College-wide user reporting functionality and capabilities
- Provide data visualization software such as Tableau and software that can produce infographics. [Maximize use of existing visualization software, e.g., Apex, which is part of Argos package.]
- Create a resource that lists all of the district’s software options to help match department need with appropriate software.
- Create a central repository for writeable forms to eliminate endless searching for the correct form and ensuring the most recent form is available.
- Establish a method to deploy information about the most current software available to ensure that faculty and staff are aware that newer versions of software are available.

- Support desktop configurations that have options for ergonomic keyboards with appropriate keyboard trays.
- Provide best practices for universal design of computers and workstations for students with a list of equipment and software.
- Support ongoing improvements to marketing and messaging to students, faculty, staff, and community through webpage revamp, mobile-friendly interface, current/dynamic content display on big screen TV displays throughout campus (Instruction Office, Student Services, Library, Learning Assistance lobby, Honors Program, etc.)

5. Discovery and Training

- Provide training in Banner modules and 3rd party software applications
- Enhance Banner staff skills by supplying internal and external training opportunities
- Provide ongoing and relevant technology training to IT staff [moved up here from the bottom]
- Provide online training modules available on demand for not only office software such as PowerPoint, Access, and Excel, but also specialized software including Adobe products, infographics, and data visualization. [Leverage Lynda.com?]
- Conduct periodic Discovery Sessions on what's new focused on college goals and major initiatives:
- Send reps from key technology interest groups to conferences such as EduCAUSE, TechEd; campus groups may include Instruction Office, Disabled Students Programs and Services/High Tech Center, Language Learning Center, Online Learning Support Center, IT, Marketing
- Convene "think tank" groups periodically such as the one that responded to Civitas' presentation on data analytics and visualization
- Conduct periodic In-House Discovery Sessions on what the college already owns or that IT already developed to maximize use of existing tools and reports before requesting/buying new ones.
- Move to a Technology Training Center and Online Assistance Center that offers training for faculty and staff in all areas of relevant technology

6. Fiscal

- Carefully manage ongoing technology expenditures
- Conscious budget planning and analysis related to the overall cost of technology will be conducted on an ongoing basis including one time purchases, maintenance, replacement, and support costs
 - Desktops, laptops and peripherals
 - Classroom presentation equipment
 - EAS (BANNER) and all related support systems
 - Other distributed systems (i.e. imaging systems)
- Recruit and retain quality technical staff to maximize limited staffing budget

V. IT Goals and Objectives

Overview

Historically, IT has divided its goals into “strategic” and “tactical” goals. Tactical goals are the short term, immediate requirements. Strategic goals are the long term, frequently on-going items like projects such as upgrading the network and providing wireless access, producing system enhancements, and developing mobile apps which require significant resources to achieve.

With the advent of the Planning for Institutional Effectiveness (PIE) process, including the annual updates to PIE, the names and forms have changed, but the processes for determining IT priorities has remained consistent. IT is actively involved in various committees, taskforces, and meetings around Campus where impromptu suggestions are made or future activities discussed which may establish a new goal or modify a priority so that support will be available when that activity takes place.

Additionally, IT has distributed some of its academic and administrative support workforce around campus so that personnel live and work with the people they are supporting. This provides the opportunity to build relationships with the users as well as offering another direct communications path. IT leadership also tries to meet with individual academic departments every three years to solicit their input on the services provided and anticipated future needs.

All of the goals and objectives within this plan fall within a three to five year planning process. In addition, this plan will be reviewed each year by the College’s Information Technology Advisory Committee (ITAC) to provide updates as the technology environment at the College evolves.

IT Goals and Objectives

1. Deliver prompt, courteous service to all clients.
2. Direct IT planning at the institutional level and provide leadership, partnership and support to divisions and departments within the College to ensure the appropriate implementation and application of technology.
3. Collegially establish, communicate, and enforce standards for the use and delivery of information and educational technology.
4. Facilitate and encourage the use of information technologies within the College.
5. Maintain the mechanisms for appropriate information technology access, security, availability, and integrity.
6. Manage the physical infrastructure in support of IT, assuring the reliability and availability to meet current and future requirements.
7. Identify, implement, and manage institutional databases as a College resource.
8. Evaluate and enhance the effectiveness of IT resources including human, physical, and financial resources.
9. Research and evaluate emerging technologies and implement and integrate new technology as appropriate.
10. Educate and train the College Community in the use and application of information and educational technology through consultation and instruction.
11. Focus on current and evolving communication technologies to enhance communications with Students, Faculty and the Community while supporting the College commitment to excellence in Student Learning.
12. Represent and act as advocate for the College Community at the local, state, national and international level.
13. Utilize educational technology to provide faculty more flexibility in the method of delivery of instruction and instructional material.
14. Continue to provide the technology for distance learning courses.
15. Continue to enhance and leverage the Luminis Campus Portal and Banner Web Self Service modules for students, staff, and faculty.

16. In conjunction with Technical Services, implement and support standardized audio visual systems in all permanent classrooms, laboratories, and across the campus as is appropriate.

17. Based on available funding, upgrade campus video streaming application (Mediacast) to a state-of-the-art system to support streaming media services

18. Investigate high speed 10Gigabit Internet service with CENIC.

19. Upgrade campus to Datacenter network backbone to 100Gigabit.

20. Continue to implement Single Sign On (SSO) and authentication systems as appropriate for all logins via the Luminis portal.

VI. Strategic Objectives

This matrix of strategic objectives is aligned to the College goals and is used to describe and measure the goals of the Technology Master Plan including the planned completion date and a current status. This will be used by the Information Technology staff and other campus personnel to measure the effectiveness of the plans goals. This is a “first pass” type template to ensure that strategic objectives are included, prioritized, and fully addressed.

Any Technology Plan involves an ongoing process. The goals and strategies set forth in this document require periodic review and assessment. It is the intention of Mt. San Antonio College to incorporate review of the Technology Master Plan as part of the institution’s overall planning process and to align the information technology planning process with the institution’s other strategic and tactical planning processes.

STRATEGIC OBJECTIVES 2015

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS/STATUS DATE
5, 9, 11, 15	STUDENT SERVICES: Improve College-wide communications capabilities	Implement integrated, web based system (Luminis and Banner) CHANGE: Implement Luminis 5	Complete Phase I by Summer 2016	Complete by Spring 2016
5, 13	STUDENT SERVICES: Implement online counseling			Completed
5, 15	STUDENT SERVICES: Upgrade Mobile App	Upgrade to next enhanced version of MountieAPP; Mobile App to include Facility Services		Ongoing
5, 9	ACADEMIC SYSTEMS: Increase use of technology for students	Implement Banner 9 and related services Luminis site portal	Based on Allusion timeline	In Process
6, 11	ACADEMIC SYSTEMS: Increased communications and priority setting between IT and Faculty	Enhance direct, regular, on-going, involvement and communication with Instructional Leaders and use feedback from meetings as part of IT on-going Evaluation & Assessment Process	Ongoing	Increase in current participation in academic planning meetings at all levels BA will participate effectively in departmental meetings

STRATEGIC OBJECTIVES 2015

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS/STATUS DATE
5, 15	ADMINISTRATIVE SYSTEMS: Continue to improve BANNER system	Establish a Banner Team Lead group and Administrative Systems Advisory Group and partner with other CCCs/3CSC to develop specifications for Banner CALB enhancements	Ongoing	Regular monthly meetings with published meeting notes
5	ADMINISTRATIVE SYSTEMS: Implement Document Management System	Continued implementation on campus based on resources BA as required	Ongoing	Pending Funding Progress monitored and reported Phase I implementation in process
5, 9	ADMINISTRATIVE SYSTEMS: Network upgrades	Completed in significant prod areas	Ongoing	Migration from existing host environment to include long term objective of cloud integration
5, 9	ADMINISTRATIVE SYSTEMS: Network upgrades	Completed in current environment	Estimated Summer 2016	Request submitted to replace SAN directors to enable long term upgrade for higher speeds dependent upon funding
5, 9	ADMINISTRATIVE SYSTEMS: Network upgrades	Enhance redundancy for servers and networks in Datacenter	Estimated end of 2016	Funding in place and equipment on order
5, 9	ADMINISTRATIVE SYSTEMS: Network upgrades	Upgrade and expand wireless in buildings 6/9B based on demands	Ongoing	Ongoing enhancements required, planning in progress
5, 9	ADMINISTRATIVE SYSTEMS: Improve IT Security	Added logging Monitor tools, added staff, continue to explore DR options	Ongoing	Ongoing DR submitted to board appropriate requests for resources to work on DR planning
9, 11	ADMINISTRATIVE SYSTEMS: Increase involvement of IT in campus technology	Provide consulting services to college for acquisition of technology for college,		Ongoing

MT. SAC INFORMATION TECHNOLOGY MASTER PLAN 2016

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS/STATUS DATE
		involvement with Institutional leadership and ongoing evaluations and assessments		
5	ADMINISTRATIVE SYSTEMS: Reduce Printing services delivery and improve assistance	Offer goal of 24 hour turn around, online submissions and design assistance for "Best Use" of equipment	Ongoing	Completed including ongoing efforts to improve services
5	ADMINISTRATIVE SYSTEMS: Improve Mail services	Goal has been reached, Campus has plans to use standard mail services to more effectively communicate with students and alumni, Mail Services departments aware and prepared to handle in cost effective manner	Ongoing	Completed

STRATEGIC OBJECTIVES 2015

College Goal	OBJECTIVE	PLAN	PLANNED COMPLETION DATE	STATUS / DATE
15	ADMINISTRATIVE SYSTEMS: Payment Processing	Credit card payment processing system direct to Heartland systems completed, Phase 2 move to TouchNet Gateway owned by Heartland	Fall 2015	Complete by Fall 2015
4	TRAINING: Enhance BANNER staff skills	Enhance Banner staff skills by supplying internal and external training opportunities	Ongoing	Ongoing
8	TRAINING: Continually offer staff professional development opportunities in emerging technology and tools required to support college on an ongoing basis	Ensure participation in technology training workshops and appropriate hands on conferences to ensure staff are fully trained on required skills to move college forward into new technology environments	Ongoing	Complete by June 2016 Identify and determine participation in upcoming educational opportunities
8	TRAINING: Offer technology training to all faculty and staff in all technology areas	Coordinate with POD on ongoing training in all areas of relevant tech	Ongoing	Ongoing
15	FISCAL: Under current fiscal environment as determined by President and Cabinet	Manage ongoing technology expenditures, recruit and retain quality technical staff, asses new projects based on priorities, ensure that appropriate technical resources required for successful completion	Ongoing	Ongoing resource needs based on funded projects

VII. Appendix

A. Committees and Councils

The following Committees and Councils have ongoing dialogue with IT regarding technology issues.

1. **PRESIDENT'S ADVISORY COUNCIL** - provides the primary planning body for the College and a forum to review and recommend the direction and focus for the College consistent with the College's Mission, Vision, and Core Values.
2. **CURRICULUM AND INSTRUCTION COUNCIL** – makes recommendations about educational design and delivery policies and procedures to the Academic Senate.
3. **DISTANCE LEARNING COMMITTEE** - discusses, review, and evaluate distance learning modes of instruction, and recommend new opportunities for distance learning and teaching.
4. **OUTCOMES COMMITTEE** - oversees outcomes assessment at the course, program, and institutional levels, as well as administrative unit outcomes.
5. **INFORMATION TECHNOLOGY ADVISORY COMMITTEE** - sets goals and provides direction to the College in development, integration, application, and delivery of information and educational technologies.
6. **INSTITUTIONAL EFFECTIVENESS COMMITTEE** – takes responsibility for institutional assessment, evaluation, and coordination of activities leading to improvement of institutional effectiveness.
7. **BUDGET COMMITTEE** - develops, recommends, and evaluates policies and processes relating to all aspects of College finances.
8. **HEALTH AND SAFETY COMMITTEE** - provides education and resources pertaining to contemporary physical, mental health, and safety issues for the campus community.
9. **PROFESSIONAL DEVELOPMENT COUNCIL** - gives direction to the office of Professional and Organizational Development for facilitating activities and events that ensure classified staff, faculty, and managers expand their knowledge and skills they need to increase student success and enhance their professional development. The Council is comprised of classified, faculty, and management representatives.

B. References

1. MT. San Antonio College Educational Master Plan 2009 (This plan has been taken into account, however, the assumptions are no longer valid due to issues such reductions in the California State budget)
2. Planning for Institutional Effectiveness (PIE): College-wide Program Review and Planning <http://www.mtsac.edu/governance/committees/iec/planning/documents.html>
3. IT Technology Infrastructure Standards – available by request. Contact Dale Vickers, 909.274.4374.
4. Mt. San Antonio College Goals and Strategic Objectives 2015-17 <http://www.mtsac.edu/about/overview/mission-and-goals.html>
5. New Facilities Master Plan - 2012 <http://www.mtsac.edu/construction/reports-and-publications/master-plan.html>
6. Help Desk Coverage Expansion Plan – available by request. Contact Dale Vickers, 909.274.4374.
7. Internal White Paper related to Mobile Applications – available by request. Contact Robert Hughes, 909.274.4373.
8. IT Professional Development Technology Training Plan