

**OFFICE
OF
INFORMATION & INSTRUCTIONAL
TECHNOLOGY**

***TECHNOLOGY ENABLED
LEARNING SPACES***



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1 Introduction

1.1 Document Organization

This document is organized as follows:

Section 1	Provides an overview of the Strategic Plan Goals for Technology at Albany State University.
Section 2	Outlines the program services required to fulfill the vision for classroom technology at ASU.
Section 3	Specifies AVI requirement and maintenance support standards for the program
Section 4	List of rooms included in the first phase of the program.
Section 5	Provides specification for PC's to be used in the instructor stands
Section 6	Provides specification for classroom workstations

This is a living document and must be update each Academic Year to reflect changes in technology and as needs of the campus stakeholder community evolves.

1.2 Guiding Principles

The Strategic Plan adopted for 2006 through 2011, provides visionary direction and specifies objectives for long-term support for the academic and administrative environment of the institution. Below is a summary of the Strategic Plan Goals for Technology at Albany State University:

Goal 4: Provide State of the Art Technology

Provide and maintain state of the art technology infrastructure that supports the University's mission and goals.

Components of the Technology Infrastructure include:

- Instructional Support
- Student/Staff Services
- Administrative Services
- Distance/On-line Learning
- Business Processes
- Training Support
- Internal/External Communication

Strategy 1

Provide Information Technology to support services needed in instruction, learning, and research.

Strategy 2

Increase productivity in daily operations for staff, administrative, business processes, and communication.

Strategy 3

Increase the accessibility of wireless communication throughout the campus.

Strategy 4

Provide training and support for students involved in distance learning and on-line courses.

Strategy 5

Monitor the technology infrastructure to ensure adequate support for training, maintenance, and availability of the latest innovations.

2 Learning Space Standards

This program is designed to increase the number of campus spaces that offer state-of-the-art, technology. The following chart provides an overview of the types of spaces available on the ASU Campus.

Classification	Description
No Technology	Technology is not enabled in this space. No PC's are accessible and the space is not within reach of the wireless network.
Lab	Enclosed space with at least six personal computers, but not designed to support instructional delivery
Instructional	Classroom/facility with ceiling-mounted projector and screen/white board.
Interactive Instructional	Classroom/facility with ceiling-mounted projector and interactive white board
Instructional Lab	Classroom/facility with at least six student work stations, ceiling-mounted projector and screen/white board.
VTC enabled	Instructional classroom/facility that offers video-teleconferencing capability
Auditorium	Classroom/facility with seating capacity to accommodate at least 100 people enabled with sound, personal computer, wide-screen projection, and cameras.

The goal is to provide the students of Albany State University with technology which will enhance their learning experiences. The minimum standards for each space by classification, excluding No Technology, follows:

1. Instructional

- An instructional podium/stand is located at the front of the room.
- Seating for the instructor should be sturdy, adjustable, the right height in relation to the podium, ergonomically correct, and cushioned.
- The space has a resident PC or connector to allow for the use of a notebook PC. Ideally, the capability for both.
- Built in overhead projector integrated to the resident PC/or AV connector for use of a notebook.
- A white board or projection screen is installed and appropriately mounted for projection.

2. Lab

- An instructional podium/stand is located at the front of the room.
- Seating for the instructor should be sturdy, adjustable, the right height in relation to the podium, ergonomically correct, and cushioned.
- The space has at least six resident PC's with at least 2 USB connectors and CD/DVD Rom to allow for the use of a notebook PC.
- Seating should be adjustable, ergonomically correct and cushioned.
- Student work-areas must be designed to allow for adequate privacy, and also accommodate the capability to use reference materials during use.
- Network based laser printer, preferably color capable, installed in the room.

3. Interactive Instructional

- An instructional podium/stand is located at the front of the room.
- Seating for the instructor should be sturdy, adjustable, the right height in relation to the podium, ergonomically correct, and cushioned.

- The space has a resident PC or connector to allow for the use of a notebook PC. Ideally, the capability for both.
- If there is a resident PC, it is secured and has at least two USB ports accessible and is equipped with a CD/DVD Rom
- Built in overhead projector integrated and wired to the resident PC/ stand with an additional connector split to allow for use of a notebook.
- An interactive white board that allows for annotation, print to PDF or jpg, and web publication of lecture notes.

4. Instructional Labs

This space must meet the specifications of both the instructional interactive and lab spaces outline above.

5. Auditorium

This space meets the Instructional Specifications previous outline plus the following

- All equipment must be manageable using a touch screen controller, prefer Creston or AMX.
- Document camera with the ability to display in color or black and white
- VHS/DVD player.
- The equipment should be below or to the side of the instructor work space to maximize the site lines and the work space.
- The podium should have a locked, rear door so equipment can be accessed from the rear allowing for quick equipment changes and wiring.
- Front of the podium should house the keyboard and other equipment behind a door that locks.
- The podium should have additional power sockets.
- The room should either be wireless or there should be easily accessible Ethernet ports near the station.
- Should be equipped to allow for the connection of a notebook computer
- Built in overhead projector
- One Large Screen: (at least 9 feet wide) with electric controls.
- Integrate Sound and microphone system with wireless microphones capable for supporting multiple speakers.
- Seating for the instructor should be sturdy, adjustable, the right height in relation to the podium, ergonomically correct, and cushioned.

6. VTC enabled

This learning space is equipped to provide video-conferencing capability to off-campus sites.

- Installed video conferencing system using SIP protocol, preferably Tandberg or Polycom
- Built in overhead projector controlled by the Touch Panel
- Split screen capability to allow switching between video and computer projection
- All equipment must be operable from the Instructor podium
- Appropriate number of cameras for size of the room
- Projection screen or interactive whiteboard adequate for viewing within the classroom.
- Interactive instructional technology appropriate to the setting which allows the instructor/lecturer to write notes in digital ink and save the work to share electronically with students
- Privacy monitor for viewing by the instructor during delivery
- Seating for the instructor should be sturdy, adjustable, the right height in relation to the podium, ergonomically correct, and cushioned.
- Printer
- Telephone and fax machine

3 Systems Integration Standard

3.1.1 General Requirements for System Implementation

Initial installation of classrooms will be completed by an AV Solution Provider in a turnkey fashion. The implementation must include equipment (vendor or owner-furnished), implementation services and warranty. A design must be provided prior to install that includes engineering, coordination and labor for display, video, and related equipment to include required plates, connectors and cables.

System Engineering, including:

- Preparation of system functional interconnection diagram.
- Facility and equipment location.

Project Coordination, including meetings with the ASU technical representatives and project coordination, including:

- System implementation monitoring.
- Schedule project and oversee the VI team
- Equipment staging at our shop
- Assure final punch-list items are completed

Field Labor, including:

- Pulling and bundling cables
- Terminating of all cable
- Labeling all cable
- Mounting and terminating computer interfaces
- Installing structural systems for multimedia equipment
- Program control System
- Adjusting and balancing audio settings
- Assure that the installed systems functions as proposed
- Site clean up and rubbish disposal
- Provide end-user training

3.1.2 Usage Tracking and Loss Prevention

For learning spaces fully enabled with technology, it is important to track usage to ensure that the space is fully utilized. Full utilization of technology enabled learning space aids in the prevention of loss due to theft or vandalism. As such, the ASU standard includes integration to software based tracking and management solution that provides for the following:

- Tracking of use of all equipment
- Ability to enter specifications of equipment to use for tracking,
- SNMP connectors in order to monitor removal of components from the network
- Remote room control in order to immediately assist users with troubleshooting issues and problems, and
- Installation with theft prevention hardware.

3.1.3 Turnkey Inclusions

- All equipment, wire and accessories required for a fully functional audio and visual system.
- Labor associated with turnkey engineering, installation, programming, testing and training.
- Documentation package including as -built system CAD diagrams and Operation and Maintenance manuals.
- Coordination and cooperation with the construction team in regards to installing the system.
- Upon request, the AV Solution Provider shall furnish a one-year maintenance contract and proposal.
- User training on system operation.
- Any additional trips, labor or materials due to failure of the other work forces to have the audio/visual system rough-in work completed as anticipated and previously confirmed, will be added to the project billing as required.
- DMX, DSS or other outside signals (provided by others) are not included in this scope of work, however the AV Solution Provider shall integrate up to two pre -approved source

equipment's outputs into the systems that the AV Solution Provider is providing, and additionally shall provide basic control of these devices.

3.1.4 Control System Source Code

The AV Solution Provider must agree to provide ASU with the source code for each controller installed in exchange for appropriate compensation. All AMX and Crestron control system source code developed for the project is the property of Albany State University.

3.1.5 Maintenance Requirements

1. Vendor shall provide a labor warranty for a minimum of 90 days; a warranty period of at least two years must be provided for equipment.
2. The vendor shall bear all material and labor costs for repair of equipment and defects and failure accruing within the warranty period.
3. Service and maintenance during the warranty period shall be no less than the service requirements under the maintenance agreement.
4. The warranty period commences for the date of installation and completion of acceptance by ASU.
5. If equipment does not perform to manufacturer's specifications during the warranty period, the VENDOR shall replace the unit(s) with new equipment of the same model.
6. The maintenance/service agreement shall commence upon expiration of the warranty period.
7. Vendor shall provide telephone support and a toll-free phone number for placing service calls, which will be available Monday through Friday, 8:00 a.m. to 5:00 p.m. Within four (4) hours of receiving the initial service call, the vendor is required to call Albany State IT department to establish an estimated time of arrival (ETA). Business hours are between 8:00 a.m. and 5:00 p.m., Monday through Friday, excluding ASU recognized holidays.
8. Vendor will remedy and defect in software and/or equipment within forty-eight (48) hours, excluding ASU recognized holidays, of the initial service request by ASU.
9. Initial training of ASU personnel shall be conducted upon equipment installation at no cost to ASU, with the number of sessions, schedules, participants and number of participants per session identified by ASU.

4 Personal Computer Specifications

ThinkPad Notebooks	7663CTO
Product name	T61
Highlights	
Processor	Intel Core 2 Duo 2.0GHz
Operating System	XP PRO
Display size	14" WXGA TFT W/O CAM
Wireless Networking	802.11 a/b/g
Wired Networking	Integrated Gigabit Ethernet
Memory (RAM)	2GB [2 x 1GB DIMM]
Hard Drive	120GB 5400 rpm HDD
Optical Drive	DVD R/W
Graphics/Video Card	NVIDIA Quardo NVS 140M 128MB
Security	COMPUTRACE COMPLETE
Software	HI-Education XP
Technical Specifications	
Processor	Intel Core 2 Duo 2.0GHz
Operating System	XP PRO
Display size, type & resolution	14" WXGA TFT 1440 X 900
Wireless Networking	802.11 a/b/g
Wired Networking Card	Integrated Gigabit Ethernet
Bluetooth Wireless	No
Modem	56K V.92 designed modem
Memory (installed/max)	2GB / 4GB
Memory slots (total/available)	2 SODIMM / 0 SODIMM
Hard Drive (size/speed)	120GB 5400 rpm HDD
Optical Drive	DVD R/W
Graphics/Video Card	NVIDIA Quardo NVS 140M 128MB
Fingerprint Reader	NA
Security Chip	

ThinkPad Notebooks
Product name

7663CTO
T61

Pointing Devices	Embedded Security Subsystem 2.0
USB/Firewire	ThinkPad UltraNav
PCMCIA Slots	3 USB 2.0 ports
	1 Type I or 2 Type II
Battery	6 Cell Extended Life Lithium-Ion
Battery Average Run Time	up to 3.8 Hours
Weight	5.3lbs with optical drive and battery

5 Classroom Workstation Specifications

Think Centre Desktops	A55 Tower
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Custom model part number (MTM)	926502U
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Highlights

Processor	Pentium Dual Core E2160 / 1.8 GHz
Operating System	Win XP Pro
Form Factor	Tower
Memory (RAM)	1 GB (installed) / 4 GB (max)
Hard Drive	80 GB - standard - Serial ATA-300 - 7200 rpm
Optical Drive	CD-RW / DVD-ROM combo
Networking	Integrated Gigabit Ethernet
Graphics/Video Card	*Intel GMA 3000 (integrated)
Security	

Technical Specifications

Processor	
Operating System	Win XP Pro
Form Factor	Tower
Slots x bays total (available)	4 X 4
Dimensions (WxDxH)	16.7 in x 14.1 in x 6.9 in
Weight	22 lbs
Memory (installed/max)	1 GB/4 GB
Memory slots (total/available)	1--0

**Think Centre
Desktops**

A55 Tower

Hard Drive (size/speed)	80 GB - standard - Serial ATA-300 - 7200 rpm
Optical Drive	CD-RW / DVD-ROM combo
Optical Drive Speed	48x (CD) / 16x (DVD)
Wired Networking Card	Integrated Gigabit Ethernet
Modem	None
Graphics/Video Card	Intel GMA 3000 (integrated)
Max. Resolution	
Security Chip	Embedded Security Subsystem 2.0
Keyboard	USB Preferred Pro Full size PS/2
Mouse	USB Optical Wheel Mouse
Slots total (available) and type	1(1) PCI,1(1) PCI Express 1X Total=1
Port connectors	8 USB 2.0 (2 front, 6 back), External Display (VGA), External Microphone / Line in (back), External Microphone / Line in (front), Headphone / Line out (back), Headphone / Line out (front), Keyboard (PS/2), Mouse (PS/2), RJ-45
Warranty	3 years Onsite