



**H. COUNCILL TRENHOLM STATE TECHNICAL  
COLLEGE**

**TECHNOLOGY PLAN  
2012-2013 ACADEMIC YEAR**

**MARCH 19, 2013**

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## WHAT WE BELIEVE:

Students need to be able to use a wide variety of technological tools to enhance their future success as students and workers. It is imperative for all students to have access to information via technology as a basis for lifelong learning.

It is essential for all learners, including educators, to process and manage information through the skillful use of technology. Skillful use of technology supports the development of process skills such as flexibility, adaptability, critical thinking, problem solving and collaboration which are essential to success in our rapidly changing information age.

Networked technology systems permit efficient and effective communications within and outside the college.

Technology allows us to better serve the diverse learning styles of our students and educate them for a wider range of intelligence (e.g., verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinesthetic, musical, interpersonal, and intrapersonal -- H. Gardner).

Technology maximizes productivity and efficiency and enables schools to better prepare students for future learning. Our institution must prepare students for today's workplace and the workplace of the future.

# ESSENTIAL INGREDIENTS

## *(MISSION STATEMENT & LEARNING GOALS)*

The mission of Trenholm State Technical College, in partnership with the community, is to provide students with the knowledge, skills, and qualities required to be successful in a diverse society. To achieve its mission, the college is working towards the achievement of the following goals:

- To ensure access to quality career preparation and life-long learning for all persons, without regard for age, gender, ethnicity, religion, or disability.
- To provide opportunities for individuals to receive certificates, associate degrees, and industry recognized credentials in current and emerging occupational and technical fields.
- To enhance economic development in the region through programs and services for area employers and the community.
- To meet the needs of a variety of community-based populations through credit, non-credit, and basic education courses, offering flexible schedules and convenient instructional sites; and making available services, activities, and other resources.
- To improve the effectiveness and efficiency of career preparation for students by providing appropriate assessments and career counseling services, and by implementing articulation agreements with local school systems and universities.
- To develop faculty and staff who are competent, professional, and enthusiastic in advancing the mission of the College.
- To institutionalize the strategic planning process to allocate, develop, and maintain college resources, and undertake strategic reviews of all programs and services to ensure the long-term viability of the College.
- To integrate the most up-to-date technological, andragogical, curricular and environmental resources into its teaching, service, support, and administrative functions.
- To establish an environment which is safe, healthy, aesthetically pleasing, accessible to students, and otherwise conducive to learning?

# KEY COMPONENTS

## **DEVELOPMENT OF LIFELONG LEARNERS**

Assures skillful use of technology to support the development of lifelong learning skills and process skills such as: flexibility, adaptability, critical thinking, problem solving, and collaboration which are essential to success in our rapidly changing information age.

### **LIFELONG LEARNERS ARE:**

- Responsible for their own learning
- Skilled in accessing & processing information
- Confident in using technological tools
- Able to solve complex problems alone or collaboratively
- Capable of being creative and innovative
- Able to communicate locally, nationally, and world-wide

### **PLANNING PROCESS FOR STAFF TRAINING**

- Provide introduction to networked systems.
- Ensure Faculty and Staff is aware of available technology through professional development.
- Supports using basic network software.
- Incorporates training for new curriculum with technology applications.

### **EQUAL ACCESS FOR THE LEARNING COMMUNITY**

- Establishes basic technological networking capabilities provided at all sites.
- Provides for minimum standards of hardware and software for all students, staff, and sites.
- Assures that all students, staff and sites will be provided with and have equal access to minimum standards of hardware and software.
- Expands and enhances voice communications to provide student/faculty/community greater access to school information.
- Enables students/faculty/community via telecommunications, access to school learning resources, classroom lessons/assignments, and school information 24 hours a day.
- Provides the learning community with greater opportunity for interaction, collaboration and information exchange. The school will become a vital meeting place for a host of community services.
- Promotes equitable access to learning technology as a community investment and encourages an active partnership between schools, businesses, homes and the community.

### **INTEGRATION OF TECHNOLOGY IN THE CLASSROOM**

- Expands classroom tools for teaching and learning.
- Provides for the integration of multiple resources for existing and emerging curriculum.
- Enables learning community to communicate more effectively, access and process information, and work productively.
- Links the classroom with educational resources within the building, community and worldwide.
- Creates a collaborative environment for project oriented activities.
- Increases the productivity of students as they work toward attaining learning outcomes.
- Encourages the use of multimedia tools enabling students to become active and experiential learners.

- Enables learning to involve partnerships within the school, among schools, and with other organizations.

### **SUPPORT FOR INSTRUCTIONAL CHANGE**

- Facilitates access to collegial support and best practice information from a wide variety of resources.
- Expands the variety of teaching tools and strategies to support diverse learning styles.
- Supports productive and efficient management of student information, assessment and portfolio data.
- Increases support for emerging instructional strategies: inter-disciplinary, collaborative, and active learning options.
- Enables curriculum, instruction and assessment to be developed and aligned with each other.
- Provides a system that helps students, parents and teachers work together to support educational outcomes.

PROPOSED LEARNING OPPORTUNITIES AND TECHNOLOGY ENHANCEMENTS

Goal  
1

## Install Microsoft Email and Calendaring System

To better facilitate collaboration between faculty and staff, a better email and calendaring system is required. The current email system is shared by faculty, staff and students and although it has served the college well pass time to move to a more professional system where calendars, documents and a host of efforts can be better managed. The college has already implemented the Microsoft Project Server to manage projects within the college and this new email and calendaring system will only enhance that functionality.

Hardware	Software	Users	Curriculum	Start-up	Costs
Server to Host Microsoft Exchange	Microsoft Exchange Server	Faculty and Staff	All Courses Currently being taught can take advantage of this new technology	Summer or Fall 2013	\$8000

Goal  
2

## Network Based Video Surveillance System

Goal 2 of this plan involves the continued expansion of our network based video surveillance system. This system is integrated into the existing college IP network with the sole purpose of recording activities within strategic locations of the college to enhance college safety and security. Locations identified will have a network based camera/s, mounting hardware. Recording of camera information to be performed centrally to a digital video recording system to be housed at one of the college's primary locations. It is expected this system will be ready for implementation by fall 2013. Specific focus of this project will be on the Patterson and Trenholm campuses.

Hardware	Software	Used By	Location	Start-up	Costs
IP Network Based Cameras  Digital Video Recording System (DVR)	DVR Software	Security Coordinator and Administrator	Patterson Campus  Trenholm Campus	Sept 2012	\$6000

## PC Hardware/Software Lifecycle Trenholm and Patterson Campuses

All PC hardware and software will have a campus lifecycle on average of four to six years from date of purchase depending on program and availability of funds. The current goal for minimum processor speed, operating system, hard drive capacity, network speed are: Latest Intel processors, Microsoft Windows 7 Professional, disk space of 300 GB, minimum 4GB RAM and 10/100 network interface card. The table below lists by campus lab, administrative function, a planned replacement schedule for hardware and software. The minimum software configuration for all college PCs will be Microsoft XP Professional, Microsoft Office 2007, Acrobat Reader and Microsoft Outlook). When PCs are removed/replaced from one lab they are evaluated for use in other areas.

REV 03-11-13										
	Patterson Campus									
Function/Lab	Room	Hardware	Quantity	Install Date	Replacement Date			Memory	Notes	
Drafting Lab	B111	i3 3 Ghz	15	2010				4 GB		
MIS Instructional Lab	E101A	i3 3 Ghz	20	2011				4 GB		
MIS Microsoft Lab	E101B	i3 3 Ghz	20	2011				4 GB		
MIS Cisco Lab	E101C	i3 3 Ghz	20	2011				4 GB		
MIS Instructional Lab	E101D	Core 2 Duo 3.24 Ghz	20	2008				4 GB		
Interior Design	E102	i3 3 Ghz	1	2012				4 GB		
Air Conditioning	E104	Core 2 Duo 2.4 Ghz	17	2012				2 GB	Title III from Library	
Machine Tool Technology	F102A	Core 2 Duo 3 Ghz	7	2009				4 GB		
Machine Tool Technology	F102A	P4 3.0 Ghz	2	2005				1 GB		
Auto Mechanics	G101C	Core 2 Duo 2.4 Ghz	19	2012				2 GB	Title III from Library	
Auto Mechanics	G102	P4 3 Ghz	15	2012				1 GB	From Oracle Lab	
Welding	H102A	P4 3 Ghz	4	2006				1 GB		
LEC	J106	Core 2 Duo 2.67 Ghz	20	2008				4 GB		
LEC	J107	Core 2 Duo 2.67 Ghz	16	2008				4 GB		
Graphic Arts	K101	IMAC 2.66 Ghz	20	2008				2 GB		



Graphic Arts	K101	IMAC 2.66 Ghz	12	2012				2 GB		
Radio/TV	K102	P4 3 Ghz	8	2006				1 GB	Not In Use	
Diesel Mechanics	L101A	Core 2 Duo 2.65 Ghz	5	2008				4 GB		
Industrial Electronics	M102-1	P4 3 Ghz	12	2006				1 GB		
Industrial Electronics	M102-2	Core 2 Duo 2.4 Ghz	15	2012				2 GB	Title III from Library	
Student Support Services	M101	i3 3 Ghz	9	2011				4 GB		
Auto Manufacturing MES Ctrl	Q103	Core 2 Duo 2.66 Ghz	6	2008				2 GB		
Auto Manufacturing	Q104	Core 2 Duo 2.66	12	2008				2 GB		
Auto Manufacturing Robotics	Q106	Core 2 Duo 3.0	6	2010				4 GB		
Cosmetology		P4 3 Ghz	4	2005				1 GB		

	Trenholm Campus							
Function/Lab	Room	Hardware Software	Quantity	Install Date				Memory
MIS Instructional Lab	L212	i3 2.93 Ghz	21	2010				4 GB
MIS Instructional Lab	L210	i3 3.1 Ghz	16	2011				4 GB
MIS Instructional Lab	L211	i3 3.1 Ghz	16	2011				4 GB
MIS Instructional Lab	L308	Core 2 Duo 2.93 Ghz	16	2011				4 GB
MIS Instructional Lab	L309	Core 2 Duo 2.93 Ghz	16	2011				4 GB
Medical Assist Lab	B113	Core 2 Duo 2.13 Ghz	30	2010				4 GB
EMT Lab	E101D	Core 2 Duo	14	2009				4 GB
LEC	F102A	Core 2 Duo 3.0 Ghz	27	2008				4 GB
SSS Lab	F101B	P4 3.6 Ghz	14	2006				1 GB
Auto Body	G102A	Core 2 Duo 2.13 Ghz	9	2007				4 GB
Radiology Lab	H116	i3 2.93 Ghz	26	2010				4 GB
Childcare Lab	I	Core 2 Duo 2.33 Ghz	12	2010				4 GB
Dental Lab	J115	Core 2 Duo 2.66 Ghz	10	2008				4 GB
Medical Assist Lab	J117	i3 3.1 Ghz	19	2011				4 GB
Student Center lab	D	Core 2 Duo 2.33 Ghz		2010				4 GB
Culinary Arts		Core 2 Duo 3.0 Ghz	21	2010				3 GB
JDEC	118	Core 2 Duo 2.93 Ghz	26	2011				4 GB

		Trenholm Campus								
	B111	P4 3 Ghz	3	2005				1 gig		
Medical Assist Lab	B115	P4 3 Ghz	21	2005				1 gig		Medical Assist Lab
Medical Assist Lab	C108	P4 3.6 Ghz	20	2006				1 gig		Medical Assist Lab
SSS Lab	E101D	P4 1.66 Ghz	6	2002				256 MB	Being replaced by DOL grant	SSS Lab
EMT Lab	F101	P4 3 Ghz	18	2007				1 gig		EMT Lab
LEC	F101A	P4 2.8 Ghz	3	2004				256 MB		LEC
LEC	G102A	Duo2	12	2007					Installing Now	LEC
Auto Body	H101	P4 3 Ghz	4					1 gig	Howards	Auto Body
Ahead/FTW Lab	H101	P4 3 Ghz	2					1 gig	Dells	Ahead/FTW Lab
Ahead/FTW Lab	H102	P4 1.66 Ghz	15	2002		2006		256 MB		Ahead/FTW Lab
GED Lab	H102A	P4 1.66 Ghz	3					256 MB		GED Lab
GED Lab	H102A	P4 3 Ghz	4	2007				1 gig		GED Lab
GED Lab	H102B	P4 1.66 Ghz	8	2002		2006		256 MB		GED Lab
GED Lab	J	P4 2 Ghz	10					256 MB	Transferred from SSS	GED Lab
Dental Lab	J117	P4 3 Ghz	21	2005				1 gig		Dental Lab
Medical Assist Lab	B113	P4 3 Ghz	26	2005				1 gig		Medical Assist Lab
Medical Assist Lab	Trailer	P4 3 Ghz	10	2006				1 gig		Medical Assist Lab

Library/Culinary									
	Room	Hardware Software	Quantity	Year Installed	Replacement Schedule			Memory	
Function/Lab									
	L212	Server and thin Clients	21	2007					
MIS Instructional Lab	L210	2.40 Core 2 Duo	16	2008					
MIS Instructional Lab	L211	2.40 Core 2 Duo	16	2008					
MIS Instructional Lab	L308	2.40 Core 2 Duo	16	2008					
MIS Instructional Lab	L309	2.40 Core 2 Duo	16	2008					
Culinary Lab	Mall	P4 2.4 Ghz	25	2003		2007			

Goal  
4

## Multi-Media Smart Classrooms

### College Wide

Goal four requires the continuous evaluation and installation of one smart classroom per year to enhance course delivery. The classrooms will consist of a ceiling mounted LCD projector, projector screen, Smart Technologies Sympodium, and a PC connected to the Internet. Installation locations include two classrooms on the Patterson Campus. Existing Smartboard technology will be relocated to mechanical shop classrooms. This is a continuous effort to upgrade and enhance classroom technology as newer technology becomes available.

Hardware	Software	Curriculum	Start-up	Cost (Estimate)
Smart Technologies Sympodium  Internet Enabled Desktop  Document Camera	Control software	N/A	August 2013	\$7,500

## Upgrade Public Information Display System College Wide

Goal five involves the expansion and updating of the Public Information Display Systems throughout the college. This effort will be funded through Title IIIB activity 3. We purchase and deploy a new distribution server and software and expand the number of displays in the college by placing new displays in various strategic locations.

Hardware	Software	Curriculum	Start-up	Cost (Estimate)
Display Server Software  Client Software  New LCD Displays	Control software	N/A	August 2013	\$24000