CTE Course Description and Standards Crosswalk

Course Information	
Course Name	A+, Part II
Course Number	BB830
Number of High School Credits	.5
Sequence or CTEPS (You must first have the Sequence or CTEPS entered into the EED-CTE system.)	Information Technology, Support Technician
Date of district Course Revision	New
Career & Technical Student Organization (CTSO)	
CTSO embedded in this sequence	BPA
Occupational Standards	
Source of Occupational Standards	CompTIA
Names/Numbers of Occupational Standards	220-802
Registration Information	
Course Description (brief paragraph – as shown in your student handbook or course list)	This course prepares students to obtain the A+ Computer Certification. It is the next course to take following the A+ class. The nationally recognized certification for the A+ certification is the CompTIA's Exam 220-802. This course is designed to prepare students for competency in passing this exam. Students completing this course at AVTEC will receive .5 high school credit.
Instructional Topic Headings (please separate each heading by a semi-colon)	A+ Exam 220-802 covers operating systems, security and troubleshooting. The following knowledge domains are addressed: Operating systems, security, mobile devices, troubleshooting
Summative Assessments and Standards	
Technical Skills Assessment (TSA)	Yes
Course addresses:	A+ certification (Exam 220-802)
New Alaska ELA and Math Standards	Yes
Alaska Cultural Standards	Yes
All Aspects of Industry (AAI)	Yes

DISTRICT NAME: KPBSD

Core Technical Standards	Yes
Employability Standards	Yes
Employability Standards	
Source of Employability Standards	State of Alaska
Tech Prep	
Current Tech Prep Articulation Agreement? (Y/N)	Yes
Date of Current Agreement	Dec. 2014
Postsecondary Institution Name	AVTEC
Postsecondary Course Name	Fundamental PC Support
Postsecondary Course Number	IT 103
# of Postsecondary Credits	4

Additional CTE Course Information

Author	
Course developed by	Dan Bohrnsen (KPBSD) and Trish Hart (AVTEC)
Course adapted from	
Date of previous course revision	New course
Course Delivery Model	
Is the course brokered through another institution or agency? (Y/N)	TestOut Corporation (REV 11/12) LabSim PC Pro

Standards Alignment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Students will learn the basics of operating systems and the basics of selecting and installing a CPU.	CompTIA 1.1	IT11, 2 IT-PRG1 2,3,4, 9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST .9-12.4 RST .9-12.10 WHST.9-12.4 WHST.9-12.8 WHST.9-12.9	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will examine devices and components used for computer repair and maintenance, examine procedures for troubleshooting systems.	CompTIA 4.2, 4.1	IT11,12 IT-PRG1,2,3,4,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST .9-12.4 RST.9-12.10	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
			WHST.9 - 12.4 WHST.9 - 12.8 WHST.9 - 12.9					
Students will learn guidelines and considerations to take into account when installing devices.	CompTIA 1.2, 1.4, 1.7	IT11,1 2 IT-PRG1,2, 3,4,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST .9-12.4 RST .9-12.1 0 WHST.9 - 12.4 WHST.9 - 12.8 WHST.9 - 12.9	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technolo gy	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will learn basic information about using a file system to organize and store data, and strategies for configuring a mount point and extending the volume. Students will also learn how to examine and optimize a hard disk and	CompTIA 1.2, 1.3, 1.4, 1.3, 1.7	IT11,1 2 IT-PRG1,2, 3,4,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technolo gy	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
improve the computer's overall performance.			12.1a-b RST .9-12.4 RST.9-12.10 WHST.9 - 12.4 WHST.9 - 12.8 WHST.9 - 12.9					
Students will be provided an overview of storage devices including: floppy drives, parallel ATA (IDE), Serial ATA, SCSI, Optical Media and RAID	CompTIA 1.4, 1.5, 1.2, 1.7, 1.3	IT11,12 IT-PRG1,2	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-d RST .9-12.4 RST .9-12.10 WHST.9 - 12.4 WHST.9 - 12.8 WHST.9 - 12.9	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Students will understand the basics of networking, networking hardware, configuration settings required to connect to a TCP/IP network, the basics of wireless networks, tools to troubleshoot network problems, using HomeGroup to manage authentication of resources on a home network.	CompTIA 1.6, 1.3, 4.5	IT11,12 IT-PRG1,2,3,4,9 IT-NET 3,5 IT-WD 5,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST.9-12.4 RST.9-12.10	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will be exposed to the basics of configuring network printing, and managing printing on a Windows system.	CompTIA 1.6 1.4	IT11,12 IT-PRG1,2,3,4,9 IT-NET 3,4	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST.9-12.4 RST.9-12.10 WHST.9-12.4 WHST.9-12.8 WHST.9-12.9	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
Students will learn about configuring power management on portable devices and key features of table PC's, including: touch screen interface, accelerometer, gyroscope, internal storage, phone, operating system, architecture and apps.	CompTIA 1.5, 3.1, 3.2, 3.3, 3.4, 3.5	IT11,12 IT-PRG1,2,3,4,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST.9-12.4 RST.9-12.10 WHST.9-12.4 WHST.9-12.8 WHST.9-12.9	A REI.2 N Q.1	B2,4 B2	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will use system tools and utilities, customize windows, learn how to monitor components and improve system performance, understand user accounts, learn how to use remote services to access a computer from a remote location, learn the basics of managing applications, installing updates, protecting a system through backups and using virtual memory.	CompTIA 1.4, 1.1, 1.2, 1.5, 1.8, 1.6, 1.7, 4.6, 4.7	IT11,12 IT-PRG1,2,3,4 ,9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b RST.9-12.4 RST.9-	A REI.2 N Q.1	B2,4 B2	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards **(Learner Outcomes or Knowledge & Skill Statements)**	**Specific Occupational Skills Standard**	**Common Technical Core Standards**	**New Alaska ENG/LA Standards**	**New Alaska Math Standards**	**Alaska Cultural Standards**	**Employability/ Career Readiness Standards**	**All Aspects of Industry/ Systems**	**Assessment**
			12.10 WHST.9-12.4 WHST.9-12.8 WHST.9-12.9					
Students will learn how to run the upgrade advisor, install a windows operating system and migrate user settings and data using the Easy Transfer wizard and USMT and create a and run a virtual machine.	CompTIA 1.1, 1.2, 1.9	IT1,4	L.9-12.3a L.9-12.6 RST.9-12.3 RST.9-12.4	S ID.9	B2,4	A2,5,6	Technical Skills Technology Health/ Safe ty	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will understand the elements involved in managing files, configure NTFS permissions, sharing files and permissions, using offline files.	CompTIA 1.1, 1.8, 1.3, 1.4, 2.1, 1.5							PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will apply the Principle of Least Privilege to increase security, learn how to wipe data from a hard drive, configure a screen saver, apply and use common prevention methods, compare and contrast common security threats, install malware	2.1, 2.3, 2.4, 2.2, 4.7, 1.4, 1.8, 2.5, 2.6, 1.1,	IT11,12 IT-PRG1,2, 3,4,9 IT-NET 2, 3, 5	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

Student Performance Standards (Learner Outcomes or Knowledge & Skill Statements)	Specific Occupational Skills Standard	Common Technical Core Standards	New Alaska ENG/LA Standards	New Alaska Math Standards	Alaska Cultural Standards	Employability/ Career Readiness Standards	All Aspects of Industry/ Systems	Assessment
protection, scan and repair infected files and systems, unlock a locked user account, reset a password, log on to a remote computer, encrypt files and add authorized users, physically secure a wired or wireless network, prevent data emanation from a wireless network, enable the windows firewall, configure a network-based firewall using port forwarding and triggering and configure internet explorer to use a proxy server.	1.6		12.1a-b RST.9-12.4 RST.9-12.10 WHST.9-12.4 WHST.9-12.8 WHST.9-12.9					
Students will learn about troubleshooting the motherboard, RAM the CPU, storage devices, common video problems, network problems, operating system problems, repairing an installation, restoring to a restore point or restoring using a system image, troubleshooting system errors, troubleshooting workstation security issues, notebook components, printers and devise problems.	4.2, 4.3, 4.4, 4.5, 4.6, 1.3, 1.5, 1.7	IT1,4 IT-NET 5	L.9-12.3a L.9-12.6 RST.9-12.3 RST.9-12.4	S ID.9	B2,4	A2,5,6	Technical Skills Technology Health/ Safe ty	PC Pro Certification Practiced Exams CompTIA A+ Exam
Students will build a computer from scratch and troubleshoot a malfunctioning computer using the LabSim PC Pro simulated capstone exercise.	1.7, 1.1, 4.2, 4.2, 1.2, 4.6,	IT11,12 IT-PRG1,2,3,4, 9	SL.9-12.1a-d SL.9-12.4 SL.9-12.6 L.9-12.6 L.9-12.1a-b	A REI.2 N Q.1	B2,4	A2,5	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam

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			RST .9-12.4 RST.9-12.10 WHST.9- 12.4 WHST.9- 12.8 WHST.9- 12.9					
Students will participate in a "Certification Practice Exam" consisting of 15 simulation questions that are selected from practice exams from all 13 PC Pro Domains.	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0, 13.0	IT11,2, IT-SUP 3,4, 5,7 IT-PRG 3,6, 8,9, 10	L.9-12.3a L.9-12.6 RST. 9-12.3 RST. 9-12.4	S ID.9	B2,4	A2,5,6	Technical Skills Technology	PC Pro Certification Practiced Exams CompTIA A+ Exam
Encourage CTSO involvement.		CRP1,2,7, 8 ,9,11	L 9-12.6 SL 9-12.1,6		B2,4 E7,8	A2,5	Technical Skills Community Planning Management	Portfolio

Instructional Resources

List the major instructional resources used for this course: (websites, textbooks, essential equipment, reference materials, supplies)

2012 TestOut Corporation (R 11/12)
LabSim PC PRO http://www.testout.com/docs/lesson-plans/pcpro_nf_arl-p.pdf?sfvrsn=4

CompTIA A+ (2012 Edition) Exam 220-801 Objectives: http://certification.comptia.org/

Business Professionals of America: http://www.bpa.org