**CTE Course Description and Standards Crosswalk**

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| **Course Information** |
| Course Name | A+ |
| Course Number | BB820 |
| 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 | 10-15-2014 |
| **Career & Technical Student Organization (CTSO)** |
| CTSO embedded in this sequence | BPA |
| **Occupational Standards** |
| Source of Occupational Standards | CompTIA |
| Names/Numbers of Occupational Standards | 220-801 A+ Certification |
| **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.The nationally recognized certification for the A+ certification is the CompTIA’s Exam 220-801. This course is designed to prepare students for competency in passing this exam. |
| Instructional Topic Headings (please separate each heading by a semi-colon) | A+ Exam 220-801 covers PC hardware and networking. The following knowledge domains are addressed: PC hardware; Networking; Laptops; Printers; Operational procedures  |
| **Summative Assessments and Standards** |
| Technical Skills Assessment (TSA) | Yes |
|  Course addresses:  |  |
| New Alaska ELA and Math Standards | Yes |
| Alaska Cultural Standards | Yes |
| All Aspects of Industry (AAI) | Yes |
| 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 | Nov. 2014 |
| Postsecondary Institution Name | AVTEC |
| Postsecondary Course Name | Fundamental PC Support |
| Postsecondary Course Number | IT 101 |
| # of Postsecondary Credits | 4 |

**Additional CTE Course Information**

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| **Author** |
| Course developed by | Dan Bohrnsen (KPBSD) and Trish Hart (AVTEC) |
| Course adapted from | MatSu Career and Technical Center (Trish Zugg: Revised by Amy Riddle) |
| Date of previous course revision | May 2008 |
| **Course Delivery Model** |
| Is the course brokered through another institution or agency? (Y/N) | TestOut Corporation (REV 11/12) LabSim PC Pro |

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| **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** |
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| Students will learn how to connect common peripherals to standard ports. Items discussed include: Elements of a computer, Functions that computers perform, Componentization, Standardization, Types of ports and connectors | CompTIA1.7 | IT11,12IT-PRG1,2 | W4.9-12,R4.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will examine the protection and safety of users and computers, professionalism, PC tools and PC maintenance. | CompTIA 5.1, 5.4, 5.3, 2.10, 5.2 | IT1,4 | R3.9-12,R4.9-12,W | S ID.9 | B2,4 | A2,5,6 | Technical Skills Technology Health/Safe ty | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will explore basics about computer cases and form factors, power supplies, motherboards and buses, processors, memory, BIOS, expansion cards, video, audio, cooling | CompTIA1.2, 1.8, 1.6, 1.3, 1.1, 1.4 | IT11,12 IT-PRG1,2,3,4,9 | R3.9-12, R4.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will learn how to connect peripheral devices through an external port to the computer. Topics include: Serial, parallel, and PS/2, USB, IEEE 1394 displays devices. | CompTIA1.7, 1.12, 1.4, 1.11, 1.10, 1.5 | IT11,12 IT-PRG1,2,3,4,9 | R3.9-12, R4.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will be provided an overview of storage devices including: floppy drives, parallel ATA (IDE), Serial ATA, SCSI, Optical Media and RAID  | CompTIA1.4, 1.5, 1.11, 1.7,  | IT11,12 IT-PRG1,2,3,4,9 | R3.9-12, R4.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will be provided an overview of networking. Concepts include: Network hardware, networking media, Ethernet, networking addressing, IP configuration, protocols, 802.11 wireless, infrared and Bluetooth, internet connectivity,  | CompTIA2.8, 2.9, 2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.6 | IT11,12 IT-PRG1,2,3,4,9 | R3.9-12, R4.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will learn about selecting and installing printers. Concepts include: Configuring, printing and printer maintenance | CompTIA4.1, 4.2, 4.3 | IT11,12 IT-PRG1,2,3,4,9 | R3.9-12, R4.9-12R6.9-12 | A REI.2 N Q.1 | B2,4 | A2,5 | Technical Skills Technology | PC Pro Certification Practiced Exams CompTIA A+ Exam |
| Students will apply the knowledge they have obtained concerning CTSO (i.e. competitive events, technical national certification, internships, community service projects) |  | CRP1,2,7,8,9,11 | W1.9-12W4.9-12W6.9-12 |  | B2,4 E7,8 | A2,5 | Technical SkillsCommunityPlanning Management | Portfolio |
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| **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**](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/**](http://certification.comptia.org/)