Networking KSAs for Curriculum Alignment					

	2. Protocols					
	KSA Description	**Knowledge, Skill, or Ability?**	**Bloom's Taxonomy Level?**	**Cross-cutting KSAs**	**Course Number/Name**	**Learning Outcome**
a	Explain the DNS protocol.	Knowledge	2			
b	Define DNS Cache.	Knowledge	2			
c	Define Root DNS Servers.	Knowledge	2			
d	Discuss packet analyzing software (e.g. Wireshark).	Knowledge	2			
e	Use tracer tool to explore protocols.	Skill	1			
f	Interpret what a router is and how it functions (at the HS level).	Skill	3			
g	Apply secure network Protocols (e.g., IPSec, SNMP, SSH, DNS, TLS, SSL, TCP/IP, FTPS, HTTPS, SCP, ICMP).	Ability	2			
h	Identify and apply Transmission Control Protocol and Internet Protocol (TCP/IP), Internet Protocol Version 4 (IPv4), Internet Protocol Version 6 (IPv6) applications and services (e.g., rlogin, Simple Mail Transfer Protocol [SMTP], Telecommunications Network [Telnet], File Transfer Protocol [FTP], Domain Name System [DNS], Network File System [NFS], Voice over Internet Protocol [VoIP], Internet Control Message Protocol [ICMP]).	Skill	2	Software Development 1n		
i	Explain the relationship between ports, sockets, IP addresses and network services.	Knowledge	3			
j	Compare dynamic and static routing configuration.	Knowledge	2			
k	Explain the purpose of basic networking utilities (e.g. Netstat, Tracert, Traceroute, Ping IPConfig, IFConfig).	Knowledge	2			