

الساعات الأسبوعية			لغة التدريس	السنة الدراسية	اسم المادة
المجموع	العملي	النظري			
3	2	1	الإنكليزية	الثانية	شبكات

المفردات النظرية	الأسبوع
<p>Computer Network introduction</p> <p>Hierarchal link idea:</p> <ul style="list-style-type: none"> • Server: server type. • Client. • Peer to peer network • Client / Server Network 	الأول
<p>Main component of networks</p> <p>Hardware: computer, cards, media, peripheral devices</p> <p>Software: operating system of network, transmission protocol, network management system</p>	الثاني
<p>Simple idea about basic network design.</p> <ul style="list-style-type: none"> • Many thing must take when design network • Bus network • Ring network • Star network • Token ring network • Token passing network 	الثالث الرابع
<p>Generic idea about network communicate:</p> <p>Depend on network link manner:</p> <ul style="list-style-type: none"> • Single points network communicate • Multi points network communicate <p>Depend on geographic land :</p> <ul style="list-style-type: none"> • Local Area Network(LAN) : its devices • Metropolitan Area Network (MAN): its devices, technical standard characters • Wide Area Network (WAN)): its devices, technical standard characters • Wide area Development network: internet, intranet, extranet 	الخامس
<p>Network Interface Card(NIC):</p> <ul style="list-style-type: none"> • Types of Network Interface Cards • Simple idea about construct and setup NIC • Simple idea about install NIC 	السادس
<p>Cables used in network</p> <ul style="list-style-type: none"> • Type and characteristic of network cables • Twisted pair cable • Coaxial cables 	السابع

<ul style="list-style-type: none"> Fiber optic cable 	
<p>Simple idea about communicate media between network items:</p> <ul style="list-style-type: none"> Wire communicate media Wireless communicate media 	<p>الثامن التاسع</p>
<p>Frequency Bandwidth: interesting, Measurements, Limitation, Throughput, compute data transfer.</p>	<p>العاشر الحادي عشر</p>
<p>Generic essentials about network communication devices:</p> <ul style="list-style-type: none"> Modems Network Interface Card (NIC) Repeaters Hubs Switches Bridges Routers Gateways 	<p>الثاني عشر الثالث عشر</p>
<p>Network Protocols essentials work: What a Protocols ? Protocols work, Protocols characteristics, protocol defects Protocols jobs in sender device also in receiver device Binding idea Explain TCP/IP protocol and important characteristics</p>	<p>الرابع عشر الخامس عشر السادس عشر</p>
<p>Essential of OSI Basic Essentials back of OSI</p> <ul style="list-style-type: none"> Define the seven layers which OSI consist of Define the three lower layers Define the three upper layers Define the three middle layers <p>Protocol used to communicate between analogue layers Steps of Encapsulation, then De Encapsulation Define the service of OSI Simple idea about standard characteristics IEEE What is netting, ways to develop netting security.</p>	<p>السابع عشر الثامن عشر التاسع عشر</p>
<p>IP addressing and network mask.</p> <ul style="list-style-type: none"> IP addressing. MAC hardware Address Addresses recognition protocol ARP Network division technique to sub network 	<p>العشرون الواحد والعشرون الثاني والعشرون</p>
<p>Simple idea about virtual private network VPN:</p> <ul style="list-style-type: none"> Characteristics. Component. Protocols. 	<p>الثالث والعشرون الرابع والعشرون</p>

<ul style="list-style-type: none"> • Theoretic component 	
<p>Network security essentials:</p> <ul style="list-style-type: none"> • Risks threats network and weakly points. • Protections Ways and tools • Solve network generic problems <p>Computer and network security composition:</p> <ul style="list-style-type: none"> • Humanity. • Hardware. • Software. • Database <p>Network weakly points essentials, hackers type, safety ways</p> <p>Recent Spy way at network and computer center.</p> <p>Idea about computer and network crim.</p> <p>Idea about legality legislations</p>	<p>الخامس والعشرون السادس والعشرون</p> <p>السابع والعشرون</p>
<p>Decoding: essentials, types, and ways.</p> <ul style="list-style-type: none"> • Changeable Decoding way • Compensational decoding way 	<p>الثامن - الثلاثون</p>