

上海建桥学院课程教学进度计划表

Teaching Schedule

一、基本信息 Basic Information

课程代码 Course Code	2140019	课程名称 Course Title	计算机系统与网络技术 Computer System and Network Technology
课程学分 Course Credits	3	总学时 Studying Hours	48
授课教师 Professor	Shufeng Zhu	教师邮箱 Email	shufeng_2000@sina.com
上课班级 Class	数媒体技术(双语)B22-2/B22-2 Bachelor in Digital Media Technology B22-2/B22-2	上课教室 Classroom	计算机中心 318/信息 328 Computer Room
答疑时间 Q&A Schedule	周一 5-6 节 Monday 5-6		
主要教材 Textbook	COMPUTER NETWORKING Top-down Approach, James F. Kurose, Keith W.Ross, PEARSON, Eighth Edition		
参考资料 Bibliography	An Introduction to Computer Networks, Release 2.0.6, Peter L Dordal 计算机网络(第7版), 谢希仁		

二、课程教学进度 Teaching progress

周次 Week/Times	教学内容 Topics	教学方式 Teaching Methods	作业 Assignment
1	Chapter 1 Computer Networks and the Internet 第 1 章 计算机网络和因特网 What is the Internet? What are protocols? Network edge: hosts, access networks, and physical media. Network Core: Packet/Circuit Switching, Internet Architecture. Safety. Protocol layer, and service model 什么是因特网? 什么是协议? 网络边缘:主机、接入网络、物理介质。网络核心:分组/电路交换, 互联网结构。安全。协议层、服务模型。	Lecture and Discussion 授课与讨论	

2	<p>Chapter 2 Application Layer 第 2 章 应用层</p> <p>Principles of network applications, Web and HTTP, E-mail, The Domain Name System DNS, Video streaming and content distribution networks 网络应用原理, Web 和 HTTP, 电子邮件, DNS, 视频流和内容分发网络.</p>	Lecture and Discussion 授课与讨论	Homework 1 家庭作业 1
3	<p>用 Apache 服务器软件搭建一个 Web 网站。 Setting a Web Site in the Apache</p>	Lab	
5	<p>Chapter 3 Transport Layer 第 3 章 运输层</p> <p>Transport-layer services, Connectionless transport: UDP, Principles of reliable data transfer. Connection-oriented transport: TCP 传输层服务, 无连接传输: UDP, 可靠数据传输的原则, 面向连接的传输: TCP</p>	Lecture and Discussion 授课与讨论	Homework 2 家庭作业 2
6	<p>Chapter 4 Network Layer 第四章 网络层: 数据面</p> <p>Network Layer Overview, How Routers Work, Internet Protocol. 网络层概述, 路由器工作原理, 互联网协议。</p>	Lecture and Discussion 授课与讨论	
7	<p>Chapter 5 The Network Layer: Control Plane 第 5 章 网络层: 控制面</p> <p>Routing Algorithms, Intra-AS Routing in the Internet: OSPF, ICMP: The Internet Control Message Protocol 路由算法, 互联网中的 AS 内部路由: OSPF, ICMP: 互联网控制报文协议</p>	Lecture and Discussion 授课与讨论	Homework 3 家庭作业 3
8-9	<p>用 Cisco Packet Tracer 对路由器就行模拟配置。 Setting Routers in Cisco Packet Tracer</p>	Lab	
10	<p>Chapter 6 Link Layer & LANs 第 6 章 链路层和局域网</p> <p>Introduction to the Link Layer, Switched Local Area Networks, Data Center Networking 链路层概述, 交换局域网, 数据中心网络</p>	Lecture and Discussion 授课与讨论	Homework 4 家庭作业 4
11-12	<p>用 Cisco Packet Tracer 对交换机就行模拟配置。 Setting Switchers in Cisco Packet Tracer</p>	Lab	

13	Chapter 7 Wireless & Mobile Network 第 7 章 无线网络和移动网络 Overview of Wireless and mobile networks, WiFi:802.11 Wireless LAN, Cellular Internet Access, mobile IP 无线网路和移动网路概述, WiFi:802.11 无线局域网, 蜂窝互联网接入, 移动通信 IP	Lecture and Discussion 授课与讨论	Homework 5 家庭作业 5
14	Chapter 8 Security in Computer Networks 第 8 章 计算机网络中的安全 Network security, cryptography principles, message integrity and digital signature, network layer security, making wireless LAN secure, operational security 网络安全, 密码学原理, 报文完整性和数字签名, 网络层安全性, 使无线局域网安全, 操作安全	Lecture and Discussion 授课与讨论	
15	Students will present their project which they work on in the semester. The Presentation will include PPT, Recorded Video and Thesis with 1200 words. 学生将展示他们在学期中从事的项目。演讲将包括 PPT, 录制的视频和论文, 1200 字。		
16	Students will present their project which they work on in the semester. The Presentation will include PPT, Recorded Video and Thesis with 1200 words. 学生将展示他们在学期中从事的项目。演讲将包括 PPT, 录制的视频和论文, 1200 字。		

三、评价方式以及在总评成绩中的比例 Assessment Index & Weightage

总评构成 (X) Grading Computation	评价方式 Assessment Index	占比 (%) Weightage (%)
X1	期末考核: 个人项目报告 Final assessment: personal project report	50%
X2	过程考核: 个人作业 Process Assessment: Individual Assignments	20%
X3	过程考核: 3 个实验报告 Process assessment: 3 lab reports	20%
X3	过程考核: 课堂表现 Process Assessment: Classroom Participation	10%

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