

### Basic Course Information

Semester:	<b>SP24</b>	Instructor Name:	<b>Bijan Houshiar</b>
Course Title & #:	CIS 163 - Routing and Switching Essentials	Email:	<b>Bijan.houshiar@imperial.edu</b>
CRN #:	20419	Webpage (optional):	<b>Cisco.netacad.com</b>
Classroom:	<b>Online</b>	Office #:	<b>Zoom</b>
Class Dates:	<b>2/12/2024-06/07/2024</b>	Office Hours:	<b>by appointment</b>
Class Days:		Office Phone #:	
Class Times:		Emergency Contact:	
Units:	3	Class Format:	Online asynchronous

### Course Description

This course presents the architecture, components, and operations of routers and switches in a small network. Students will configure routers and switches for basic functionality. Students will configure and troubleshoot routers and switches and resolve common issues with wireless LANs static routing, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course is one of the courses required to prepare for Cisco Certified Network Associate (CCNA) certification exam. (C-ID: ITIS 151) (CSU)

### Course Prerequisite(s) and/or Corequisite(s)

*None*

### Student Learning Outcomes

Students will be able to:

Describe basic switching concepts, VLANs, and inter-VLAN routing.

Configure and troubleshoot basic operations of a switched network, VLANs, and inter-VLAN routing.

Describe the purpose, nature, and operations of a router, routing tables, and the route lookup process.

Describe and configure Dynamic Host Configuration Protocol (DHCP)

Configure and verify static routing and default routing.

Configure and troubleshoot basic operations of routers.

### Course Objectives

This course objective is to become familiar with basic routing and switching essentials.



## Textbooks & Other Resources or Links

Students will be enrolled in <https://www.netacad.com/> which has the textbook online. This online book will be available for the entire term. Students are not required to purchase textbooks.

## Course Requirements and Instructional Methods

To use course materials, Internet access and a computer that you can install Packet Tracer on are required. Windows systems are preferred.

## Course Grading Based on Course Objectives

Homework .....	up to	100 points
Chapter Exams .....		50 points
Hands-On Skills- Final Exam .....		100 Points
Final Exam .....		100 Points
Hands-on Quiz/Lab Activities .....	up to	100 Points
Discussion .....	up to	50 Points

### Grades:

A = 90 - 100 %

B = 80 - 89 %

C = 70 - 79 %

D = 60 - 69 %

F = below 60%

## Course Policies

There is no late policy. If instructor accepts a late assignment, there will be a 25% deduction for one week late if the instructor allows it. Assignments passed due by more than one week will not be accepted. Instructor may revise if there is proper documentation.

No late work will be accepted after the term ends.

Discussion has no makeup and will not be graded if submitted after the due date.



IMPERIAL VALLEY COLLEGE

## **IVC Student Resources**

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

## **Anticipated Class Schedule/Calendar**

*Weekly agenda and due dates are listed on college course Canvas.*