



# **Imperial Valley College Course Syllabus**

**Winter 2023**

## **CIS 162**

### **Computer Network Fundamentals (CRN: 15202)**

Professor:

Michael Carr (Prof. Carr)

Version: 1.0

Date

October 31, 2023



## Basic Course Information

Semester:	<b>Winter 2023</b>	Instructor Name:	<b>Michael Carr (Prof. Carr)</b>
Course Title & #:	<b>CIS 162 Computer Network Fundamentals</b>	Email:	<b>michael.carr@imperial.edu</b>
CRN #:	<b>15202</b>	Webpage (optional):	
Classroom:	<b>Online</b>	Office #:	
Class Dates:	<b>1/03 – 2/03</b>	Office Hours:	By appointment only via Zoom during the Winter semester. <a href="https://zoom.us/my/profcarr41">https://zoom.us/my/profcarr41</a>
Class Days:	<b>Online</b>	Office Phone #:	<b>760-332-8197</b>
Class Times:	<b>Online</b>	Emergency Contact:	
Units:	<b>3.0</b>	Class Format:	

## Course Description

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Course is preparation for CISCO certification.(C-ID: ITIS 150)(CSU)

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

None

## Student Learning Outcomes

- ✓ Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
- ✓ Describe and differentiate the devices and services used to support communications in data networks and the Internet.
- ✓ Describe the role of protocol layers in data networks.
- ✓ Evaluate the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments.

- ✓ Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks.
- ✓ Explain fundamental Ethernet concepts such as media, services, and operations.
- ✓ Build a simple Ethernet network using routers and switches.
- ✓ Compose Cisco command-line interface (CLI) commands to perform basic router and switch configurations.
- ✓ Experiment with common network utilities to verify small network operations and analyze data traffic.

## Course Objectives

### MEASURABLE COURSE OBJECTIVES AND MINIMUM STANDARDS FOR GRADE OF "C":

- ✓ Upon satisfactory completion of the course, students will be able to:
- ✓ Describe and differentiate the devices and services used to support communications in data networks and the Internet.
- ✓ Describe the role of protocol layers in data networks.
- ✓ Evaluate the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments.
- ✓ Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks.
- ✓ Explain fundamental Ethernet concepts such as media, services, and operations.
- ✓ Build a simple Ethernet network using routers and switches.
- ✓ Compose Cisco command-line interface (CLI) commands to perform basic router and switch configurations.
- ✓ Experiment with common network utilities to verify small network operations and analyze data traffic.



## Textbooks & Other Resources or Links

The professor and students will be using the Cisco Networking Academy (CNA) as one of the learning resources for this course. The CNA website can be found at [netacad.com](https://www.netacad.com) and contains an online textbook and all of the resources students will need for this course. **Students will not need to purchase a textbook.** Students will also be using Canvas for this course, as that is where the syllabus and detailed instructions for the course will be located.

There will also be assignments where you must use different software applications from the Microsoft Office Suite. As a student, you are eligible for Office 365 Education for free, which includes Excel, Word, PowerPoint, and OneNote. You will need your student email address to access the applications. In your internet browser, navigate to the following site to get started <https://www.microsoft.com/en-us/education/products/office>

***Sign on using your SSO (Single Sign On) credentials which are the same as your Webstar login credentials.*** It is recommended that you access this early on in the semester so you aren't dealing with access issues when the assignment is due.

## Course Requirements and Instructional Methods

We will be using Canvas to conduct this class online.

### Logging into Canvas

- a. Go to <https://www.imperial.edu/students/canvas/> and follow the login instructions to login.
- b. Once logged in, click on the course OR click on 'Courses' on the left menu and click on 'All Courses' to view your courses.
- c. Click on Home on the Canvas menu. Please watch the welcome video and read the syllabus. If you would like to watch the video with the closed captions turned on, please click on the "cc" icon on the video player bar.

This course is not self-paced and has deadlines each week. The instruction format for this class is Online (Asynchronous). This means there will be no on-campus face-to-face meetings or scheduled Zoom meetings. However, I have regularly scheduled office hours listed in the syllabus for those students who would like to meet via Zoom and ask questions. You will be given a list of weekly deliverables that you will be responsible for. You can find these under the appropriate weekly heading, for example Week 1 Lesson, Week 2 Lesson, etc. Any questions you may have about the course can be posted in the "Ask Prof. Carr" discussion area inside Canvas.



***You must have access to a computer or laptop running the Windows operating system and the Internet to be successful in this course and complete the assignments. You may not be successful trying to participate in this class or complete the assignments using a MAC computer, tablet, Chromebook or iPad as there may be compatibility issues.***

### **Course Grading Based on Course Objectives**

Your grade is based on the successful completion of the following assigned coursework below. The percentages of how each is counted toward your grade is also listed.

<b>Assigned Coursework</b>	<b>Percentage Counted Toward Grade</b>
Discussion Questions	25%
Weekly Assignments	25%
Mid-Term Exam	25%
Final Exam	25%

### **Late Submissions and Make-up Work**

All discussion questions, assignments, tests, quizzes, and exams are worth points. The point value for each discussion question, assignment, test, quiz, and exam is clearly stated along with instructions within each weekly module. Coursework submitted on time will receive instructor feedback within two weeks. Only assignments may be submitted late for a maximum of half credit, and feedback from the professor may not be submitted within two weeks. Discussion questions, tests, quizzes, and exams cannot be made up or submitted late. It's important to submit all coursework on time and communication with the professor in advance if there is difficulty submitting coursework on time. The student's success in class is very important, so each student is encouraged to reach out to the professor if they are having difficulty in class.

### **Final Grades**

Final grades are calculated based on the total points earned from all completed coursework, divided by the total possible points, multiplied by 100. That percentage will fall into one of the grade percentage ranges below. Students will be able to monitor their progress in class weekly to monitor their final grade projection. The final grade rubric is below.



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## Final Grade Rubric

Letter Grade	Percentage %
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

### Course Policies

### Professor Contact Information

Michael Carr (Prof. Carr)

I can be reached via email at [michael.carr@imperial.edu](mailto:michael.carr@imperial.edu) or you can message me via Canvas messaging. You also have the option to call or text me at 760-332-8197. You can expect a response within 24 hours, except on the weekends or holidays.

Communication with students regarding weekly class assignments is via Announcements and the Messenger within Canvas. In addition, students should use their official IVC student email account when communicating with Prof. Carr to ensure no emails are lost in spam folders or missed.

Office hours are by appointment only via Zoom during the Winter semester. My Zoom room link is <https://zoom.us/my/profcarr41>.

### Attendance

Students must log into class the first week of class, or risk being dropped from the class as a 'No Show.' The first login requires that students participate in the first discussion post under Week 1 Lesson in the Discussion Board. The first post will be an introduction of each student in a short paragraph state your name, major, and what you would like to learn from the class. Also, if you are comfortable sharing, please share your professional, educational, and career goals after graduation.

A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.

Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses,



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students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.

## Academic Honesty Policy

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the importance of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General CatalogLinks to an external site.](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

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## Career Center

Career Services Coordinator located in Room 1601

Phone: (760) 355-5721

Hours of Operation: Monday - Friday; 8:00 a.m. to 5:00 p.m.

[Career Services WebsiteLinks to an external site.](#)

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## Final Grades

Grade reports are not mailed. Students access final letter grades by logging into [www.imperial.edu](http://www.imperial.edu) [Links to an external site.](#), selecting the For Students tab, and then logging into Webstar. Final grades will be available approximately three weeks after the end of the course.

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## Financial Aid

All students, including those expecting disbursements from Financial Aid, are required to purchase course materials prior to the class start date. Outstanding tuition balances will be paid before any monies are released directly to the FA recipient.

Financial Aid is located in Building 1700

Phone: 760-355-6266

Office Hours: Monday through Friday 8:00 a.m -5:00 p.m

Lab Hours: Mon, Tue, Thurs & Friday 9:00 a.m - 5:00 p.m , Wed 10:00 a.m - 5:00 p.m

[Financial Aid Website](#) [Links to an external site.](#)

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## Registration Issues

Here is the information for issues related to registration, transcripts, and grades.

**Imperial Valley College Students:** Visit our Admissions and Records [website](#) [Links to an external site.](#) or call (760) 355-6101

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## Special Programs and Services for the Disabled

Your experience in this class is important to me; it is the policy and practice of Imperial Valley College, to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers or are qualified for accommodations, please contact the [Disabled Student Programs and Services](#) [Links to an external site.](#) (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313.

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## Student Services

### Student Services and Equity

Visit [Student Services and Equity](#) [Links to an external site.](#) for a full list of resources. Finalize your **Student Education Plan** today for Priority Registration!

### Counseling

[Counseling Department](#) [Links to an external site.](#) - Contact your counselor at (760) 355-6534

### Tutoring

Face-to-Face: The [Study Skills Center](#) [Links to an external site.](#) offers study space and free tutoring for all students. For more information call (760)355-6390

Online Tutoring: NetTutor is Imperial Valley College's online tutoring platform. To learn more about online tutoring, visit the [DE Website](#) [Links to an external site.](#).

### Associated Student Government

The student [Activities/Governance Program](#) [Links to an external site.](#) is an essential and fundamental part of the college's educational mission. Phone: (760) 355-6360

## IVC Library

- Got Questions? Get Answers! [Ask a Librarian](#) [Links to an external site.](#).
- Ask a LIBRARIAN, they are here to help! (760) 355-6445 (8:00 a.m. - 8:00 p.m.)
- Circulation Desk (760) 355-6409 (8:00 a.m. - 4:30 p.m.); (760) 355-6382 (11:00 a.m. - 8:00 p.m.)
- Reference (760) 355-6445 (8:00 a.m. - 8:00 p.m.)
- Need individual research help? (760) 355-6445 (8:00 a.m. - 8:00 p.m.)
- Need Citation Help? (760) 355-6445 (8:00 a.m. - 8:00 p.m.)
- OWL - [Online Writing Lab MLA Styles \(Purdue University\)](#) [Links to an external site.](#)
- OWL - [Online Writing Lab APA Styles \(Purdue University\)](#) [Links to an external site.](#)

## Technical Support

Visit [Canvas Help Support](#) [Links to an external site.](#) for information about logging in or resetting your password. You can also use the **HELP button** on the lower-left corner of the navigation bar of your course to contact Student Canvas Support Help Line 24/7: (877)-893-9853.



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To learn more about using Canvas, search through the [Canvas Student GuidesLinks to an external site.](#) for tutorials and tips.

The [Canvas video GuidesLinks to an external site.](#) will answer Canvas related questions. Each video is short and topic-specific.

### IVC Technology Support

Imperial Valley College offers support through the use of [Service DeskLinks to an external site.](#) This is a ticket system. All active students may log in to the system using their IVC email address and email password. Service Desk provides support for all technology-related issues.

In addition to the Service Desk ticket system, active students may seek support by calling the service desk at 760-355-6300. The service desk is open Monday thru Friday from 8 AM to 5 PM and closed Saturday and Sunday. If you leave a message, please include the following information: Full Name, Phone Number, Best Time to Return Call, and Description of Issue. We will return your call as quickly as possible.

For more information, see the [Student Technology Guide](#)      [Download Student Technology Guide](#) .

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## Military and Veteran Success Center

The mission of the [IVC Military and Veteran Success CenterLinks to an external site.](#) is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

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## Withdrawals

A student who has officially registered assumes the responsibility for completing each course in which she or he has registered. It is the student's responsibility to officially drop classes that he or she is no longer attending. Refer to the Imperial Valley College, [Course CatalogLinks to an external site.](#) for specific course refund, drop, and withdrawal "W" deadlines.

Once the final withdrawal deadline has passed, you will receive a grade in the class regardless of whether you completed or not, potentially resulting in an "F" grade on your permanent academic record. For more information, visit the Imperial Valley College, [Admission and Records website](#)



## Other Course Information

None

## 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.

**\*\*\*Subject to change without prior notice\*\*\***