

Chemistry

- CHEM 104 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
Quarters: Summer, Fall, Winter, Spring
Studies the fundamental concepts of chemistry including metric system, atomic structure, chemical reactions and gas laws, buffers, solution chemistry and acids and bases. Examines the relationship of chemical principles to current environmental and health related topics. Lab required. Prerequisites: MATH 60, or suitable placement score.
- CHEM 105 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
Quarters: Winter
Studies the fundamental concepts of chemistry, including nuclear radiation, energy, and organic chemistry. Lab required. Prerequisites: CHEM 104.
- CHEM 106 4 Credits
SURVEY OF CHEMISTRY (HEALTH)
Quarters: Spring
Studies the fundamental concepts of chemistry, including carbohydrates, lipid and protein metabolism, RNA and DNA synthesis, action of enzymes, hormones and steroids, and overall integration of metabolism. Lab required. Prerequisites: CHEM 105.
- CHEM 121 4 Credits
GENERAL CHEMISTRY
Quarters: Fall
Provides an introduction to the fundamentals of inorganic chemistry, including metric system, atomic structure, chemical reactions and gas laws, buffers, solution chemistry, and acids and bases. Lab required. Prerequisites: MATH 65 or suitable placement score.
- CHEM 122 4 Credits
GENERAL CHEMISTRY
Quarters: Winter
Covers the radiation and environmental issues. Introduces organic nomenclature, functional groups and reactions. Prerequisites: CHEM 121 or 104.
- CHEM 123 4 Credits
GENERAL CHEMISTRY
Quarters: Spring
Covers the basics of organic and biochemistry. Lab required. Prerequisites: CHEM 122
- CHEM 221 5 Credits
COLLEGE CHEMISTRY
Quarters: Fall
Studies measurement, chemical reactions, stoichiometry, thermo chemistry, atomic structure, chemical bonding and gas laws. Lab required. Prerequisites: MATH 95 or suitable placement score. Previous chemistry experience strongly recommended.
- CHEM 221 Z 4 Credits
GENERAL CHEMISTRY I
Quarters: Fall
Explores and applies principles and applications of chemistry. Emphasis on measurement, components of matter, atomic and molecular structure, quantitative relationships including foundational stoichiometry, and major classes of chemical reactions. CHEM 221Z is a lecture course; CHEM 227Z is the laboratory component. Prerequisites: Pass MATH 95 or equivalent, or suitable placement score Corequisites: CHEM 227Z Lab
- CHEM 222 5 Credits
COLLEGE CHEMISTRY
Quarters: Winter
Includes molecular bonding, solution chemistry, chemical reactions, oxidation reduction, chemical equilibrium and acid base equilibrium. Lab required. Prerequisites: CHEM 221.
- CHEM 222 Z 4 Credits
GENERAL CHEMISTRY II
Quarters: Offered as needed
Explores and apply principles presented in CH/CHE/CHEM 221Z to the study of the solid, liquid, and gaseous states of matter. Principles of stoichiometry, thermochemistry, kinetics, and foundational equilibrium are explored and applied to the study of aqueous and gas-phase chemical reactions. CHEM 222Z is a lecture course; CHEM 228Z is the laboratory component. Prerequisites: Pass CHEM 221Z and CHEM 227Z Lab Corequisites: CHEM 228Z Lab

- CHEM 223 5 Credits
COLLEGE CHEMISTRY
Quarters: Spring
Includes thermodynamics, electrochemistry, nuclear chemistry, metals, nonmetals and transition elements and brief survey of organic and biochemistry. Lab required. Prerequisites: CHEM 222.
- CHEM 223 Z 4 Credits
GENERAL CHEMISTRY III
Quarters: Offered as needed
Builds upon the principles presented in CH/CHE/CHEM 222Z, explores thermodynamics and chemical equilibrium, and applies them to the study of aqueous acid-base reactions, solubility, and electrochemistry. CHEM 223Z is a lecture course; CHEM 229Z is the laboratory component. Prerequisites: Pass CHEM 222Z and CHEM 228Z lab Corequisites: CHEM 229 Z lab
- CHEM 227 5 Credits
ORGANIC CHEMISTRY
Quarters: Fall
Presents alkanes, alkenes, stereochemistry, role of solvents and organic reactions. Lab required. Prerequisites: CHEM 223.
- CHEM 227 Z 1 Credit
GENERAL CHEMISTRY I LAB
Quarters: Fall
Experiments correspond to the topics covered in CHEM 221Z including the fundamentals of chemical measurements, quantitative relationships in chemical analysis, and understanding atomic and molecular structure. CHEM 227Z is the laboratory component; CHEM 221Z is the lecture course. Corequisites: CHEM 221Z
- CHEM 228 5 Credits
ORGANIC CHEMISTRY
Quarters: Winter
Examines alkynes, aromaticity, aromatic substitution, spectroscopy, NMR, IR, aldehydes and ketones and carboxylic acids. Lab required. Prerequisites: CHEM 227
- CHEM 228 Z 1 Credit
GENERAL CHEMISTRY II LAB
Quarters: Offered as needed
Experiments correspond to the topics covered in CHEM 222Z including the fundamentals of intermolecular interactions, stoichiometric relationships, chemical equilibria and their application to the synthesis, identification, and analysis of chemical compounds. CHEM 228Z is the laboratory component; CHEM 222Z is the lecture course. Prerequisites: Pass CHEM 221Z course and CHEM 227Z lab Corequisites: CHEM 222Z
- CHEM 229 5 Credits
ORGANIC CHEMISTRY
Quarters: Spring
Includes amines, phenols, molecular orbital theory, carbohydrates, lipids, proteins and nucleic acids. Lab required. Prerequisites: CHEM 228
- CHEM 229 Z 1 Credit
GENERAL CHEMISTRY III LAB
Quarters: Offered as needed
Experiments correspond to the topics covered in CHEM 223Z including the principles of chemical equilibria and their application to chemical analysis using volumetric and electrochemical methods. CHEM 229Z is the laboratory component; CHEM 223Z is the lecture course. Prerequisites: Pass CHEM 222Z and CHEM 228Z lab Corequisites: CHEM 223Z
- CHEM 241 5 Credits
ORGANIC CHEMISTRY
Quarters: Fall
Presents alkanes, alkenes, stereochemistry, role of solvents and organic reactions. Lab required (formerly known as CHEM 227). Prerequisites: Pass CHEM 223Z and CHEM 229Z lab
- CHEM 242 5 Credits
ORGANIC CHEMISTRY
Quarters: Offered as needed
Examines alkynes, aromaticity, aromatic substitution, spectroscopy, NMR, IR, aldehydes and ketones and carboxylic acids. Lab required. This course was previously known as CHEM 228. Prerequisites: Pass CHEM 241
- CHEM 243 5 Credits
ORGANIC CHEMISTRY
Quarters: Offered as needed
Includes amines, phenols, molecular orbital theory, carbohydrates, lipids, proteins and nucleic acids. Lab required. Course previously known as CHEM 229. Prerequisites: Pass CHEM 242

Communications

COM 111 Z 4 Credits

PUBLIC SPEAKING

Quarters: Summer, Fall, Winter, Spring

Emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations. Prerequisites: Pass WR 95 with a C- or better, or suitable writing placement exam score.

COM 218 Z 4 Credits

INTERPERSONAL COMMUNICATION

Quarters: Offered as needed

Increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships.

COM 220 4 Credits

COMMUNICATION AND GENDER

Quarters: Offered as needed

Introduces the differences of communication styles across gender identities and provides tools to manage those differences. Reviews how communication is used to create, structure, and maintain gender identities in a variety of contexts.

Computer Information Systems

CIS 100 (P/T) 4 Credits

INTRO TO PC NETWORK AND CYBERSECURITY

Quarters: Fall

This course is an introduction to the Networking and Cybersecurity courses at TVCC and is a prerequisite for CIS 101, 102, 103, 283, 284, and 285. Concepts covered in the course include computer hardware components, data center technologies, virtualization software, troubleshooting processes, and the foundational concepts of networking and cybersecurity, such as DNS, DHCP, IP addressing and the OSI model of communications. Students will have an opportunity to work with networking hardware to build a Local Area Network and have hands on experience with routing simulation software.

CIS 101 (P/T) 4 Credits

INTRODUCTION TO NETWORK

Quarters: Winter

This course is an introduction to networks. Students will be introduced to the architecture, structure, functions, components and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media and operations are introduced to provide a foundation for the curriculum. By the end of the course. students will be able to build simple LAN's, perform basic configurations for routers and switches, and implement IP addressing schemes. Prerequisites: CIS 100

CIS 102 (P/T) 4 Credits

ROUTING AND SWITCHING ESSENTIALS

Quarters: Spring

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches, and resolve common issues with virtual LAN's and inter-VLAN routing in both IPv6 networks. Some sections may have a no-cost text book option. Prerequisites: CIS 101

CIS 103 (P/T) 4 Credits

SCALING NETWORKS

Quarters: Summer

This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. Prerequisites: CIS 102

CIS 110 (P/T) 3 Credits

INFORMATION TECHNOLOGY ESSENTIALS I

Quarters: Fall

Fundamentals and advanced concepts of computer hardware and software. Assembly and installation of computer components and operating systems. Troubleshooting with system tools and diagnostic software. Includes laptops, portable devices.

CIS 122 (P/T) 4 Credits

INTRO SQL AND DATABASE DEVELOPMENT

Quarters: Fall

This course introduces the student to the concepts of structured query language (SQL) used to retrieve records from a relational database. Among covered concepts are set theory, Boolean logic, data normalization and table structure, SQL keywords and operators, primary and foreign keys, retrieval wildcards, and join types. At the conclusions of the course, students will be able to write complex queries which filter and summarize retrieved records. Course Note: Experience with spreadsheets and mathematical formulae will be helpful.

CIS 123 (P/T) 4 Credits

INTER SQL AND DATABASE DEVELOPMENT

Quarters: Winter, Spring

This course is the second in a series which covers the concepts of structured query language (SQL) used to retrieve records from a relational database. Among covered concepts are creating tables, inserting, updating and deleting records, using views, stored procedure, cursors, triggers and tools to facilitate transactional processing. At the conclusion of the course, students will be able to write complex queries controlling Data Definition and Data Manipulation, and will have been exposed to the beginning principles of programming in SQL. Prerequisites: CIS 122

CIS 124 (P/T) 4 Credits

ADV SQL AND APPLIED DATABASE DEVELOP

Quarters: Offered as needed

This course is the third in a series which covers the concepts of structured query language (SQL) and the development of relational database applications. This course serves as a capstone to the course sequence, and is devoted to the development of a database application. Students will be given examples of a business process that would benefit from a dedicated database application, and then design and develop the application to meet the identified need. Prerequisites: CIS 122, CIS 123 Previous experience with Microsoft Access is desirable, but not required.

CIS 140 (P/T) 4 Credits

INTRO TO OPERATING SYSTEMS

Quarters: Summer, Fall

Broad survey of beginning to advanced operating system topics for both the end user and administrator. Introduces history, theory, and various types of operating systems such as Microsoft, MacOSX, and Linux.

CIS 210 (P/T) 4 Credits

ADVANCED OPERATING SYSTEMS

Quarters: Offered as needed

This course provides essential knowledge and hands-on skills for mastering Linux operating systems. Designed for individuals aiming to pursue a career in IT, this course covers core topics such as system architecture, user management, file permissions, networking, and security. Through practical exercises and real-world scenarios, students will gain the expertise to troubleshoot, configure, and administer Linux environments effectively. Ideal for beginners and intermediate users opening doors to a variety of roles in system administration, DevOps, and IT support. Prerequisites: CIS 140, or instructor approval

CIS 260 (P/T) 4 Credits

CLOUD COMPUTING

Quarters: Offered as needed

Provides a strong foundation in the principles, planning, and design of cloud computing infrastructures, with an emphasis on security. Reviews the concepts of cloud services, storage, networking, cloud operations, support and troubleshooting. Prepares students for an AAS degree in Cybersecurity/Networking or skills towards cloud support associate, junior systems Analyst, junior cloud delivery engineer. Prerequisites: CIS 100, CIS 101, CIS 110, CIS 140, or instructor approval

CIS 280 3 Credits

COMPUTER INFO SYSTEM COOP WK EXP

Quarters: Offered as needed

Provides an opportunity to acquire actual work experience in the CIS field. An on-site supervisor will guide and evaluate student. Instructor approval of work setting and placement is required. For each credit earned, the student will need to document 36 hours at the work site. Prerequisites: CIS 120.

CIS 283 (P/T) 4 Credits

CYBERSECURITY FOUNDATION AND GATEWAY

Quarters: Fall

This course provides the student with an understanding of the fundamentals of cybersecurity, the concepts that help IT personnel recognize and potentially mitigate attacks against enterprise networks. Students will learn the basics of networking and the general concepts involved in maintaining a secure network computing environment. Upon successful completion of this course, students will be able to examine, describe general networking fundamentals and implement basic networking configuration techniques. Prerequisites: CIS 102, or demonstrate working knowledge of how to implement basic networking configuration.

CIS 284 (P/T) 4 Credits
CYBERSECURITY ESSENTIALS
Quarters: Winter

This course evaluates cybersecurity principles and demonstrates how to secure a network computing environment through the application of security controls. Students will learn the nature and scope of today's cybersecurity challenges, strategies for network defense, as well as detailed information about next-generation cybersecurity solutions. Students will also deploy a variety of security methodologies as well as technologies and concepts used for implementing a secure network environment. Prerequisites: CIS 283

CIS 285 (P/T) 4 Credits
CYBERSECURITY INFRASTRUCTURE CONFIG
Quarters: Spring

This course provides the student with a general understanding of how to install, configure, and manage firewalls for defense of enterprise network architecture. Students will learn the theory and configuration steps for setting up the security, networking, threat prevention, logging, and reporting features of next generation firewall technologies. Prerequisites: CIS 284

CIS 297 (P/T) 3 Credits
CAPSTONE PROJECT II
Quarters: Spring

This course is a continuation of a two-term sequence begun in CIS 296, where students identify, design and produce a complete client project in one or more aspects of the degree's technology strands (networking, cybersecurity, database development, or server administration). Depending on the scope of the project, this work may be completed individually or in a team with other students. During the second term, students will complete the development work identified in their project proposal completed in CIS 296, and then prepare project documentation once the project has been accepted by the client. Prerequisites: Instructor approval

Computer Science

CS 101 4 Credits
COMPUTER FUNDAMENTALS I
Quarters: Summer, Fall, Winter, Spring

Introduction to computer concepts to include the following areas; computer fundamentals, key applications, and living online. Basic introduction to computer hardware, computer software, and manipulating an operating system. An elementary summary of common program functions and office suites. A straightforward overview of networks, the internet, email, and social impact of networking technologies.

CS 133 CP 4 Credits
COMPUTER PROGRAMMING: C++
Quarters: Offered as needed

Introduces computer programming using the C++ languages, including the structure of the language; manipulation of data, arrays and objects; and how to handle input and output functions. Uses well structured program designs and object oriented programming. Prerequisites: BA 131, or CS 120 or 160, or instructor approval.

CS 160 4 Credits
ORIENTATION TO PROGRAMMING
Quarters: Fall

Explores the field of computer science, providing an overview of machine architecture, software development and engineering, data organization, problem-solving strategies, ethics, and theory of computation. Explores career options and develops rudimentary software development skills using (OOP) Object Oriented. Prerequisites: MATH 60 or suitable placement score.

CS 161 4 Credits
COMPUTER SCIENCE I
Quarters: Offered as needed

Introduces structured methods, including program design concepts, algorithm development, use of pseudo code in designing algorithms, elementary data types, and write code using an (OOP) Object Oriented Programming language. Prerequisites: CS 160.

CS 162 4 Credits
COMPUTER SCIENCE II
Quarters: Offered as needed

Continues the study of computer science, including linear data structures, file access, recursion, and object oriented programming. Prerequisites: CS 161.

CS 194 (P/T) 3 Credits

WEB ESSENTIALS

Quarters: Winter

In this course students will learn to use, edit, secure and extend a Content Management System (CMS) for the development of a webpage. Best practices in Search Engine Management and Optimization. Secure Sockets Layer (SSL) and web publishing will also be explored. Students will be introduced to the basics of web development coding as well, through a practical approach of how to modify existing code within CMS's rather than building code from scratch. The course begins with the setup of a web server and domain names, then transitions into a project lasting the entire term with continual improvements to a webpage based on student interest. There will be an emphasis on modern phot-heavy page structure and design.

CS 195 3 Credits

WEB DESIGN

Quarters: Spring

Presents the fundamental concepts and techniques used for the design, development, and implementation of web pages using (HTML) Hyper Text Markup Language and (CSS) Cascading Style Sheets.

CS 240 (P/T) 4 Credits

SERVER OPERATING SYSTEMS 1

Quarters: Winter

Microsoft Windows Server 2008 Active Directory Configuration prepares students to develop the skills needed to manage a Windows Server 2008 system and to prepare to pass the MCTS 70-640 certification exam. While the focus of topics is on the configuration of Active Directory and related services, coverage of Windows foundational topics such as the file system and networking are also included. Extensive coverage begins with an introduction to Windows Server 2008 and goes on to active directory design, account management, group policy management and configuration, certificate services, AD LOS, AD RMS, AD FS, server core, Windows Hyper-V virtualization, and server management.

CS 241 (P/T) 4 Credits

SERVER OPERATING SYSTEMS 2

Quarters: Spring

This course prepares students to configure networks using the Microsoft Windows Server platform operating system and to be prepared to take the Windows Server certification exams. The course focuses on updates to the software and in-depth coverage of the network aspects of Windows Server, this course includes topics such networking in a Windows environment, configuring DHCP, implementing DNS, and securing a Windows Server.

CS 242 (P/T) 4 Credits

SERVER OPERATING SYSTEMS 3

Quarters: Fall

Microsoft Windows Server 2008, Server Administration prepares students to administer networks using the Microsoft Windows Server 2008 operating system and to pass the MCITP 70-646 certification exam. Focusing on updates to the software and in-depth coverage of the administration aspects of Windows Server 2008, this course includes topics such as installing, configuring, managing and troubleshooting. In addition, the book includes fundamental coverage of topics from other MCTS certifications.

CS 280 1 Credit

COMPUTER SCIENCE COOP WK EXP

Quarters: Fall, Winter, Spring

Designed to give students an opportunity to acquire actual work experience in their chosen field. An on-site supervisor will supervise and evaluate the work experience student. Instructor approval of work setting and placement is required. For each credit earned, the student will need to document 36 hours at the work site. Some sections may have a no-cost text book option.

Criminal Justice

CJ 100 3 Credits

INTRO TO CRIMINAL JUSTICE

Quarters: Fall, Spring

Introduces the philosophy, history, objectives and functions of the American criminal justice system. Focuses on crime in America and policing.

CJ 111 3 Credits

CONCEPTS OF ENFORCEMENT SERVICES

Quarters: Fall

Studies the concepts, theories, and principles of police operation and behavior in an era of changing community attitudes, special interest groups, and minority relations.

- CJ 112 (P/T) 3 Credits
PATROL PROCEDURES
Quarters: Winter
Describes the nature and purpose of patrol activities for law enforcement officers. Includes routine and emergency procedures and types of controls.
- CJ 113 (P/T) 3 Credits
ACCIDENT INVESTIGATION/TRAFFIC LAWS
Quarters: Spring
Studies the principles and procedures used to investigate and report traffic accidents. Includes basic traffic laws.
- CJ 120 3 Credits
INTRO TO JUDICIAL PROCESS
Quarters: Fall
Studies the basic processes in the criminal justice system, covering the steps in a criminal prosecution from the decision to prosecute through sentencing.
- CJ 130 3 Credits
INTRO TO CORRECTIONS
Quarters: Fall
Surveys the history and evolution of corrections, law and legal processes, and the correctional process.
- CJ 132 3 Credits
INTRO TO PAROLE AND PROBATION
Quarters: Fall
Introduces the use of parole and probation as a means of controlling criminal offenders within the community. Includes the philosophy, historical development and contemporary functioning of parole and probation agencies and officers.
- CJ 140 3 Credits
U.S. CRIMINAL JUSTICE SYSTEM
Quarters: Winter
Emphasizes the adjunction and correctional aspects of the criminal justice system. Prerequisites: CJ 100.
- CJ 200 (P/T) 3 Credits
COMMUNITY RELATIONS
Quarters: Spring
Examines how the relationship between the community and the criminal justice system is clarified and enhanced. Investigates how community misunderstandings, lack of cooperation, and mistrust may paradoxically be generated by the system's efforts to make the community a safer place.
- CJ 201 3 Credits
INTRO TO JUVENILE JUSTICE SYSTEM
Quarters: Winter
Presents the concept of delinquency, the history and development of the juvenile justice system, theories of delinquency, environmental influences on delinquency, and controlling juvenile offenders.
- CJ 202 (P/T) 3 Credits
VIOLENCE AND AGRESSION
Quarters: Winter
Explores the causes and extent of violence in society and the family, and examines preventative measures available to reduce violence in society.
- CJ 203 (P/T) 3 Credits
CRISIS INTERVENTION
Quarters: Spring
Presents techniques and approaches to crisis intervention for entry level criminal justice professionals. Covers initial intervention, defusing and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening, and mediation.
- CJ 205 (P/T) 3 Credits
VICTIMS OF CRIME
Quarters: Spring
Examines the role of victims of crime in the justice system and their treatment by different criminal justice agencies, national and state data on victimization by types of crime, psychology trauma suffered by victims of violent crimes and paths to recovery, programs available to victims, and victim-related legislation.

CJ 207 (P/T) 3 Credits

CRIMINAL JUSTICE DOCUMENTATION

Quarters: Winter

This course is designed to provide the necessary information to become a knowledgeable and skillful writer of narrative reports which document original crimes and follow-up investigations for students entering the Criminal Justice field. The class will focus on the skills needed to write a report that is complete, clear, accurate, and convincing. The actual writing of reports will be a major component of the course. Specialized formats which meet the needs of various types of investigative activities including crime scene processing, interviews with suspects and witnesses, undercover operations, and the execution of search warrants will be explored. Basic writing skills such as grammar and spelling accuracy related to Criminal Justice terminology will be emphasized. Some sections may have a low-cost text book option. Prerequisites: CJ 100, WR 115 or higher, or professional in the field, or consent of instructor. All prerequisite courses must be completed with a grade of "C" or better.

CJ 208 (P/T) 3 Credits

ETHICS IN CRIMINAL JUSTICE

Quarters: Spring

This course examines the many difficult decisions that criminal justice professionals make in an environment of competing interests. The decision-making of criminal justice professionals is often impacted by their ethical dilemmas. Emphasis is placed on addressing moral issues and concerns of our justice process in personal, social, and criminal justice contexts.

CJ 209 3 Credits

INTRO TO CAREERS IN CRIM JUSTICE

Quarters: Fall

Surveys careers in law, law enforcement, courts, and corrections. Includes facility visitation and contact with persons working in the criminal justice system.

CJ 210 (P/T) 3 Credits

CRIMINAL INVESTIGATION I

Quarters: Offered as needed

Introduces the fundamentals, theory, and history of criminal investigation in the justice system. Describes crime scene-to-courtroom aspects with emphasis on techniques to specific crimes. Co-requisite: CJ 216

CJ 211 (P/T) 3 Credits

CRIMINAL INVESTIGATIONS II

Quarters: Offered as needed

Continues the study and application of investigative techniques for various offenses. Includes collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interview and interrogation, follow up and case preparation. Prerequisites: CJ 210. Co-requisite: CJ 226.

CJ 212 (P/T) 3 Credits

CRIMINAL INVESTIGATIONS III

Quarters: Offered as needed

Continues the study and application of investigative techniques for various crimes. Stresses scientific method, thoroughness and presentation of evidence. Explores follow up case preparation, including familiarization with the state crime lab facilities and its assistance to law enforcement agencies. Prerequisites: CJ 211. Co-requisite: CJ 236.

CJ 216 (P/T) 1 Credit

CRIME SCENE TECHNICIAN I

Quarters: Offered as needed

Presents techniques of locating, collecting, and identifying physical evidence. Includes the use of fingerprinting, casts and molds, photography, and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite CJ 210

CJ 220 3 Credits

CRIMINAL LAW

Quarters: Spring

Examines the basic concepts of criminal law through studying the essential elements of a crime, the defenses to criminal conduct, and the justifications for criminal laws and punishment. Familiarizes the student with the various crimes against persons and property.

CJ 222 3 Credits

PROCEDURAL LAW

Quarters: Spring

Examines the United States Constitution and Bill of Rights and their impact upon law enforcement, with emphasis on search warrants, interviews, arrest and booking, search and seizure issues, 5th Amendment rights, right to counsel, evidentiary issues and the criminal trial.

CJ 223 3 Credits

RULES OF EVIDENCE

Quarters: Spring

Reviews basic concepts of the requirements for admissibility of evidence, the various burdens of proof, how evidence is used at trial, relevance, competency, privileges, opinion and expert testimony, the hearsay rule and its exceptions, and an introductory review of evidence obtained in violation of the Constitution.

CJ 225		3 Credits
CORRECTIONS LAW		
Quarters: Offered as needed		
Explores several historical and current cases involving inmate crimes and malpractice with inmates. Examines prisoner's rights, correctional staffs' rights, and emerging trends resulting from recent court cases.		
CJ 226	(P/T)	1 Credit
CRIME SCENE TECHNICIAN II		
Quarters: Offered as needed		
Presents techniques of locating, collecting, and identifying physical evidence. Includes the use of fingerprinting, casts and molds, photography and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite: CJ 211.		
CJ 232	(P/T)	3 Credits
CORRECTIONS CASEWORK		
Quarters: Winter		
Studies the basic concepts of interviewing and counseling techniques used by correctional officers in one-to-one contacts with clients. Builds rudimentary skills through role-playing and demonstration in preparation for practice in the field and to foster an appreciation for further training. Prerequisites: CJ 132		
CJ 236	(P/T)	1 Credit
CRIME SCENE TECHNICIAN III		
Quarters: Offered as needed		
Presents techniques of locating, collecting and identifying physical evidence. Includes the use of fingerprinting, casts and molds, photography and sketching. Uses basic laboratory aids and scientific equipment in the evidence process. Co-requisite: CJ 212.		
CJ 280		1 Credit
CRIMINAL JUSTICE COOP WK EXP		
Quarters: Summer, Fall, Winter, Spring		
Provides work-related experience and study in selected Criminal Justice environments. Some sections may have a low-cost text book option.		

Crop Science

CSS 200		4 Credits
PRINCIPLES OF CROP SCIENCE		
Quarters: Spring		
Studies the origin and adaptability of crops important in world food production. Emphasizes production and management of food and forage crops important to US Agriculture. Includes field trips to area farms, experiment stations and marketing facilities to augment classroom instruction. Lab required.		
CSS 205		4 Credits
GENERAL SOILS		
Quarters: Fall		
Studies basic soil science, including genesis and morphology of soils, and their physical and chemical properties. Covers soil-water relationships, diagnosis, classification, management, essential nutrients, erosion, and soil as a medium for plant growth. Students use soil survey reports. Lab required.		
CSS 207		3 Credits
BIOTECHNOLOGY		
Quarters: Offered as needed		
This course offers an overview of modern biotechnology, focusing on basic concepts and applications. Special focus is given to the applications of biotechnology in plants and microorganisms for food and medicine. Impacts on environments and the relations of biotechnology to society are discussed.		
CSS 210		3 Credits
FORAGE PRODUCTION		
Quarters: Winter		
Identifies the annual feed requirements for a livestock operation and the selection and management of feed and forage crops to meet these needs. Studies grazing and harvest systems and alternatives, and plant growth characteristics in the development of practical farm and ranch programs. Lab required.		
CSS 211		4 Credits
INTEGRATED PEST MANAGEMENT		
Quarters: Offered as needed		
This course is designed to provide students with the understanding needed to bring together preventive, cultural, biological, and chemical control of insect pests in field and greenhouse crops. Students will learn management strategies and the use of economic thresholds for control. Students will also learn to identify regional insect pests of importance.		

CSS 215 3 Credits

SOIL NUTRIENTS AND FERTILIZER

Quarters: Offered as needed

Addresses the 9 macronutrients and 6 micronutrients essential for plant growth. Instructs students in fertilizer selection as well interpreting soil sample analysis in making fertilizer recommendations. Prerequisites: CSS 205

CSS 217 (P/T) 1 Credit

PESTICIDE SAFETY AND USE

Quarters: Winter

Presents federal and state pesticide laws and regulations, and the practices necessary for safe, effective handling and distribution of pesticides. Prepares for the "Laws and Safety Examination" for those wanting either a public or commercial license; and the "Private Applicator Examination" administered by the Oregon/Idaho State Department of Agriculture.

CSS 240 (P/T) 3 Credits

INTRO TO NOXIOUS WEEDS

Quarters: Spring

Presents elements needed for a basic understanding of the life cycles, spread, and destructive nature of noxious weeds, including how to distinguish a noxious weed from a weed and identification of the more common noxious weeds found in the Pacific Northwest. This course also serves to address management of noxious weeds through biological controls, chemical applications, and mechanical removal. Lab required. Some sections may have a no-cost text book option.