

## 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 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 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 227 5 Credits  
ORGANIC CHEMISTRY  
Quarters: Fall  
Presents alkanes, alkenes, stereochemistry, role of solvents and organic reactions. Lab required. Prerequisites: CHEM 223.
- CHEM 228 5 Credits  
ORGANIC CHEMISTRY  
Quarters: Winter  
Examines alkynes, aromaticity, aromatic substitution, spectroscopy, NMR, CMR, IR, aldehydes and ketones and carboxylic acids. Lab required. Prerequisites: CHEM 227

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

### Communications

COM 111 Z 4 Credits  
PUBLIC SPEAKING  
Quarters: Fall  
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: Summer

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: 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 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 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 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 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: Summer, 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: Summer, 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: Offered as needed  
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 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.