College Curriculum Committee

Meeting Agenda Package

November 12, 2024

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College Curriculum Committee Meeting Agenda

Facilitator: Charles Hobbs—College Curriculum Committee Chair
Recorder: Michael Vanoverbeck / Time Keeper: TBD
Date: November 12, 2024 / Time: 2:00 p.m. - 3:30 p.m.
Location: VT-124

Vision:
Compton College will be the leading institution of student learning and success in higher education.
Mission Statement:
Compton College is a welcoming and inclusive community where diverse students are supported to pursue and attain student success. Compton College provides solutions to challenges, utilizes the latest techniques for preparing the workforce and provides clear pathways for completion of programs of study, transition to a university, and securing living-wage employment.

Attendees: Victoria Martinez__; Ahmad Manzoor__; Michael Vanoverbeck__; Mayela Rodriguez__; Stefani Baez__; Susan Johnson__; Arneshia Bryant-Horn __; Shay Brown__; Jose Martinez__; Kendahl Radcliffe __; Nathan Lopez__; Paul Flor __; David McPatchell__; Noemi Monterosso__; Jesse Mills __; Bradfield Conn __; Lynn Chung __; Melain McIntosh__; Sheri Berger__; Maya Medina__; Shante Mumford__; and Charles Hobbs__.

AGENDA:

1. Approval of Agenda: November 12, 2024.

2. Approval of Minutes: October 22, 2024

3. Reports and Follow-up Questions From Attendees:
   a) Vice President, Academic Affairs
   b) Curriculum Analyst
   c) Articulation Officer
   d) Distance Education Faculty Coordinator
   e) SLO Coordinator

4. Consent Agenda Item(s):

   a) *2-Year CTE Course Review- No proposed changes*
   WELD 105 - Basic Welding for Allied Fields
   WELD 108 - Introduction to Multi-Process Welding

b) *Standard Course Review- No Proposed Changes; DE Addendum*
SPAN 153 - Spanish for Native Speakers II

c) *Articulation/Transfer Review*
SOCI 207 - Introduction to Human Services and Social Work

d) *Standard Course Review; Revised Conditions of Enrollment; DE Addendum*
SPAN 152 - Spanish for Native Speakers I

e) *Standard Course Review; Course Description Update; Revised Conditions of Enrollment; DE Addendum*
CHEM 102- Fundamentals of Chemistry

5. Action Item(s):
a) *New Courses – 1st Read*
HIST 116- Chicana/o/x History: 1848 to the Present

6. Discussion Item(s):
a) "Are First and Second Reads Always Necessary?"

7. Informational Items:
a) *College Curriculum Committee Vacancies*: STEM (1).

8. College Curriculum Committee Representative Comments and/or Future Agenda Item Recommendation(s):
a) CCC representatives may provide a comment or future agenda item recommendation(s).

9. Public Comment(s):
a) Public comments may be presented by any person not on the CCC roster in attendance.

College Curriculum Committee Meeting Minutes

Facilitator: Charles Hobbs—College Curriculum Committee Chair
Recorder: Michael VanOverbeck / Time Keeper: Victoria Martinez
Date: October 22, 2024 / Time: 2:00 p.m. - 3:30 p.m.
Location: VT-124

Vision:
Compton College will be the leading institution of student learning and success in higher education.
Mission Statement:
Compton College is a welcoming and inclusive community where diverse students are supported to pursue and attain student success. Compton College provides solutions to challenges, utilizes the latest techniques for preparing the workforce and provides clear pathways for completion of programs of study, transition to a university, and securing living-wage employment.

Attendees:
Curriculum Committee Chair (Vote only to break tie):
Charles Hobbs_X_;
Voting Members:
Victoria Martinez_X_; Ahmad Manzoor_X_; Michael VanOverbeck_X_; Stefani Baez_X_; Susan Johnson_X_; Arneshia Bryant-Horn _X_; Shay Brown_X_; Jose Martinez_X_; Kendahl Radcliffe __; Nathan Lopez_X_; Paul Flor __; David McPatchell_X_; Noemi Monterosso_X_; Jesse Mills _X_; Bradfield Conn _X_; Lynn Chung _X_;
Non-Voting Members:
Melain McIntosh_X_; Sheri Berger__; Juan Tavaraz _X_

AGENDA:
Call to order at 2:05pm

1. Approval of Agenda: October 22, 2024.
    a. Amending of agenda
        i. "Approval of Agenda: October 8, 2024" changed to "Approval of Agenda: October 22, 2024"
        ii. "Approval of Minutes: September 24, 2024" changed to "Approval of Minutes, October 8, 2024"
    b. Michael V. motioned to approve the amended agenda. Victoria M. seconded. Unanimously approved.

2. Approval of Minutes: October 8, 2024

a. David M. motioned to approve the minutes. Michael V. seconded. Unanimously approved.

3. Reports and Follow-up Questions from Attendees:
   a. Victoria M. motioned to open reports and follow-up questions 3a-3e. Shay B. seconded.

4. Vice President, Academic Affairs
   a. Information about the October 16th General Education Workgroup.
   b. Division representatives were tasked with questions to bring back to their respective division meetings.

5. Curriculum Analyst
   a. Common course number Phase 1 update

6. Articulation Officer
   a. Common Course Numbering (CCN)/AB 1111
      i. The last surveys for Phase II courses are due November 3 11:59pm for Anthropology, Sociology, Communication Studies, Child Development.
      ii. All courses will be reviewed for GE. We can potentially lose some of the current GE articulations. For example, HIST that is approved for Humanities & Social Sciences may only receive approval as a Social Science.
   b. Our most recent C-ID Update: ENGL 101E received its approval for C-ID ENGL 100.
   c. Mathematics AST Degree need to begin the update process to add the appropriate computer science courses.

7. Distance Education Faculty Coordinator – no report

8. SLO Coordinator – no report

9. David M. motioned to close reports 3a-3e. Victoria M. seconded.

10. Consent Agenda Item(s):
   a. Michael V. motioned to approve consent agenda items 4a-b. David M. seconded. Unanimously approved.
   b. *Courses Revised for Common Course Numbering* –
   POLS C1000 – American Government and Politics (formerly POLI 101)
   POLS C1000H – American Government and Politics – Honors (formerly POLI 101H)
   PSYC C1000 – Introduction to Psychology (formerly PSYC 101)
   PSYC C1000H – Introduction to Psychology – Honors (formerly PSYC 101H)
   STAT C1000 – Introduction to Statistics (formerly MATH 150)
   c. STAT C1000H – Introduction to Statistics - Honors (formerly MATH 150H)

   d. *Course Inactivations*
   SLAN 101 – Individualized American Sign Language Laboratory
   SLAN 120 – Fingerspelling and Numerical Concepts
   SLAN 200 – Principles of Sign Language Interpreting

11. Action Item(s) :
   a. Nathan L. motioned to open action item 5a for first and second read. Shay B. seconded.
   b. New Course – 1st & 2nd Read – ESTU 108 – Chicana and Latina Feminism
   c. Susan J. motioned to approve action item 5a as a first and second read. David M. seconded. Unanimously Approved.

12. Discussion Item(s):
   a. None

13. Informational Items:

a. Michael V. motioned to open informational items 7a-b. Shay B. seconded.
b. *College Curriculum Committee Vacancies*: STEM (1).
c. Reminder to attend/sign-in/email chair if absent.
d. Michael V. motioned to close informational items 7a-b. David M. seconded.

14. College Curriculum Committee Representative Comments and/or Future Agenda Item Recommendation(s):

a. David M. motioned to open the floor for committee representative comments. Susan J. seconded.
b. CCC representatives may provide a comment or future agenda item recommendation(s).
c. David M. motioned to close the floor for committee representative comments. Victoria M. seconded.

15. Public Comment(s) :

a. Michael V. motioned to open the floor for public comments. David M. seconded.
b. Public comments may be presented by any person not on the CCC roster in attendance.
c. Michael V. motioned to close the floor for public comments. David M. seconded.

Meeting ended at 2:24pm

2-Year CTE Course Review (No proposed changes) – WELD 105

Course Information

Course Discipline: WELD
Course Division: Business and Industrial Studies
Course Number: 105
Full Course Title: Basic Welding for Allied Fields
Short Title: Basic Weldng
TOP Code: 095650 - Welding Technology
SAM Code: C - Clearly Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status B - Transferable to CSU only.
Effective Term: Spring 2023
Board of Trustees Approval Date:
2023-03-21

Course Description

This is a basic course to support trade skills for students in allied fields. The course introduces students to welding equipment, nomenclature, safety, plasma and mechanical cutting, metallurgical exploration of ferrous and non-ferrous material, ductility of materials, effects of cold-working and heat treating.

Course Standards

Lecture Hours:
36.000

Activity Hours:
0.000
Lab Hours:
54.000
Outside-of-Class Hours:
72.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
36.000
Activity Hours:
0.000
Lab Hours:
54.000
Outside-of-Class Hours:
72.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
3.000
Total Hours:
90.000
Grading Method:
Letter grade only

Course Content

Lecture
Outline
SHIELDED METAL ARC WELDING (SMAW) Equipment settings Work and travel electrode angles Arc length
Approximate Time In Hours
3.00

Lecture
Outline
INTRODUCTION Safety procedures Course objectives Syllabus and text support
Approximate Time In Hours
2.00

Lab
Outline
OVERVIEW OF EQUIPMENT Safe set up of various machines Inverters Rectifiers
Approximate Time In Hours
4.00

Lab
Outline
SMAW Control of the puddle Observation of welding parameters Equal leg fillet welds Flush face cover
Approximate Time In Hours
6.00

Lab
Outline
CUTTING PROCESSES - REVIEW Loss of metal due to kerf Oxy-acetelyne Plasma Iron worker shear Bandsaw
Approximate Time In Hours
2.00

Lab
Outline
METAL CROSS PREPARATION Downhand welding Equal legs Observation of fusion face
Approximate Time In Hours
1.00

Lecture
Outline
AWS CLASSIFICATION OF ELECTRODES Mild steel Low alloyed steel Stainless steel Aluminum alloys Solid wire Flux cored wire Fluxed covered electrodes
Approximate Time In Hours
5.00

Lecture
Outline
THERMAL PROPERTIES OF WELDING Effects of heat on weldment Stress effects of overwelding Mechanical applications - heat caused by friction Grain structure changes
Approximate Time In Hours
4.00

Lab
Outline
SMAW - UTILIZING CONTROL OF HEAT EFFECTS Excessive voltage on the control of electric arc welding Long arcing or too extreme of push angle Out of position welds Controlling the puddle
Approximate Time In Hours
1.00

Lab
Outline
JOINT PREPARATIONS Tacking and fit-up techniques Fillet weld versus groove weld Strength correlation to full penetration
Approximate Time In Hours
6.00

Lecture
Outline
GAS METAL ARC WELDING (GMAW) Equipment Gases Filler metals Settings
Approximate Time In Hours
2.00

Lab
Outline
GMAW Machine set-up Weld perimeters Contact to work distance
Approximate Time In Hours
2.00

Lecture
Outline
PROPERTIES OF METAL Weldability Ferrous and non-ferrous Applications and welding processes
Approximate Time In Hours
6.00

Lab
Outline
FORMING EXERCISES Cold working Heat treating - normalizing material Grain growth Experimenting with the properties of ductility versus brittle
Approximate Time In Hours
6.00

Lecture
Outline
GAS TUNGSTEN ARC WELDING (GTAW) Equipment Adjustments: Alternating Current (AC), Direct Current (DC), frequency Applications
Approximate Time In Hours
6.00

Lab
Outline
GTAW - FERROUS surfacing beads on ferrous metal butt joint - full penetration distortion control
Approximate Time In Hours
6.00

Lab
Outline
GTAW - NON FERROUS Non-ferrous welding AC polarity Characteristics of high heat conducting metal
Approximate Time In Hours
5.00

Lecture
Outline
PHYSICAL AND MECHANICAL PROPERTIES OF METAL Welders control Print specifications to control Code specifications contributing to control of altering these properties
Approximate Time In Hours
8.00

Lab
Outline
CHARACTERISTICS OF JOINT DESIGN Work angles Travel angles Use of various electrode sizes
Approximate Time In Hours
7.00

Lab
Outline
CONTROLING DIRECTION OF ELECTRODE HEAT Welding dissimilar thicknesses of metal Control distortion Control heat direction Observe effects of travel speed and distortion Electrode choice Polarity choice
Approximate Time In Hours
8.00

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lab
Demonstrate safety procedures for safe operation of tools, machines and welding equipment.
Lab
Set up, pressurize, operate, and break-down the oxy-acetylene manifold system or cylinders for cutting.
Lecture
Exercise knowledge of effects of heat on weldment.
Lab
Prepare cuts using both the manual and plasma cutting process.
Lab
Complete gas tungsten arc weldments on butt joints using mild steel and aluminum.
Lab
Utilize the gas metal arc process to produce a quality tee joint.
Lab
Demonstrate competency in shielded metal arc welding to produce tee joints in the horizontal and flat positions.
Lecture
Demonstrate knowledge of electrode specification in accordance with American Welding Society (AWS) standards.

Student Learning Outcomes

Upon completion of this course, the student should be able to:

1. SLO #1. Upon completion of this course, students will be able to differentiate the basic welding processes from one another, e.g. SMAW,GTAW, GMAW,OFC and FCAW.

2. SLO #2. Upon completion of this course, students will be able to safely physically demonstrate the set up,use,and shut down of various welding machinery.

3. SLO # 3. Upon completion of this course, students will be able to make an informative decision about the direction of welding training that they wish to pursue,whether it be structural or light gauge,

Methods of Instruction

Demonstration
Students will be given a physical demonstration of each of the various welding processes in this course.

Discussion
Students will listen to daily lectures on each welding process in the segment of the course that they are to be taught.

Group Activities
Students will visit companies in the local area that hire welders such as SPACEX.

Guest Speakers
Speakers come from various apprenticeships to recruit our students such as Local 105 Sheet Metal and Local 433 Ironworkers Union.

Laboratory
Students will be given physical demonstrations by the Professor and or teacher's Assistant. Demonstrations consisting of Fillet welds and welds in basic weld joints such as Butt, T and Lap joints.Students will demonstrate their understanding by duplicating what they were shown to the instructor.

Lecture
Daily lectures in regards to the topic for that week will be given.
Multimedia presentations
Students will watch videos on each welding proccess to aid in their visual understanding. For example, Youtube videos on SMAW at https://www.youtube.com/watch?v=elmDvqdeMKI

Methods of Evaluation

Skills demonstrations
Exams/Quizzes
Typical Assignments
Some assignments require critical thinking:
Select the appropriate electrodes to join mild carbon steel in different thicknesses. Weld the assembly using proper polarity and mechanical clamping.

Make a uniform weld on an outside corner joint of the practice bracket using the vertical up positions with E7018 electrodes. Assess the weldments by performing a destructive test.
Other Assignments:
Join the steel practice plates provided with a square butt weld using process of choice. Check the welds for penetration and uniform size.

Course Materials

Author: Andrew Daniel Althouse
Title: Modern Welding
Edition: 12th
Publisher: Althouse
Year: 2020
Or Equivalent: No

Other:
Notebook
Leather welding gloves
Safety glasses
Welding helmet
brushes and chipping hammer

Minimum Qualification

1. Welding
Condition

2. Auto Body Technology
Condition

2-Year CTE Course Review (No proposed changes) – WELD 108

Course Information

Course Discipline: WELD
Course Division: Business and Industrial Studies
Course Number: 108
Full Course Title: Introduction to Multi-Process Welding
Short Title: Intro Multi-Process Welding
TOP Code: 095600 - Manufacturing and Industrial Technology
SAM Code: C - Clearly Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status B - Transferable to CSU only.
Effective Term: Spring 2023
Board of Trustees Approval Date:
2023-03-21

Course Description

This course is designed to provide students with basic performance qualification skills needed for employment in manufacturing and the maintenance industry. Students are introduced to multiple processes with a primary focus on developing manipulative skills commonly used in manufacturing. Welding processes covered include oxy-acetylene cutting, plasma arc cutting, Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal

Arc Welding (GMAW). The course also includes a study of occupational safety, weld symbols,and joint design. Note: Letter grade or pass/no pass option.

Course Standards

Lecture Hours:
45.000
Activity Hours:
0.000
Lab Hours:
81.000
Outside-of-Class Hours:
90.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
45.000
Activity Hours:
0.000
Lab Hours:
81.000
Outside-of-Class Hours:
90.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
4.000
Total Hours:
126.000
Grading Method:
Both - Letter with Pass/No Pass Option

Course Content

Lecture
Outline
INTRODUCTION Safety procedures Course objectives Syllabus and text support
Approximate Time In Hours
3.00

Lab
Outline
OVERVIEW OF EQUIPMENT Safe set-up of weld equipment SMAW inverter Demonstration of Direct Current (DC) -and DC+ positioning of electrode holder
Approximate Time In Hours
6.00

Lecture
Outline
CUTTING TECHNIQUES AND KERF Iron worker shear Plasma cutting Bandsaws Oxyacetylene Flame characteristics and applications 1. Carburizing 2. Neutral 3. Oxidizing flame Torch angle and manipulation
Approximate Time In Hours
3.00

Lab
Outline
CUTTING TECHNIQUES - THERMAL AND MECHANICAL Plasma Shear Bandsaw Oxyacetene
Approximate Time In Hours
3.00

Lecture
Outline
ESSENTIAL PARAMETERS THE WELDER CONTROLS Polarity choices Travel and work angle of electrode Diameter and flux covering of electrode Arc length or Contact to Work Distance (CTW) Speed at which the welder travels
Approximate Time In Hours
3.00

Lab
Outline
BEADING Surface beading in the flat position Striking an arc
Approximate Time In Hours
5.50

Lab
Outline
FABRICATION OF METAL CROSS Tacking Puddle identification Running beads with electrodes Manipulation of the electrode
Approximate Time In Hours

3.00

Lecture
Outline
ELECTRODE SPECIFICATION IDENTIFICATION Tensile strength Position Charateristics of flux
Approximate Time In Hours
2.50

Lab
Outline
2F POSITIONING OF METAL CROSS Understand the work angle Perform multi-passes Equal legs and flush face
Approximate Time In Hours
3.00

Lecture
Outline
MANIPULATION TECHNQUE Importance of fusion Difference between drag rod and whip rod Control of puddle size Arc force control
Approximate Time In Hours
2.50

Lab
Outline
CONTROL OF ELECTRODE ANGLE 3F position on metal cross The effects of gravity on the puddle Keeping puddle size to code; 2-2.5 times the diameter of the electrode Exploring how positioning of weldment effects choice of filler metal Flush cover
Approximate Time In Hours
15.00

Lecture
Outline
GMAW Set up of constant current machine Shielding gases needed for solid wire welding Contact to Work Distance (CTW) Amperage/wire feed Torch travel angle and positioning
Approximate Time In Hours
5.00

Lab
Outline

GMAW Set-up machine and wire feeder correctly Use correct travel angle Proper CTW Tack up thin gauge metal cross Tie beads together with proper heat and travel speed
Approximate Time In Hours
12.50

Lecture
Outline
THE EFFECTS OF HEAT INPUT IN WELDMENT Choices of weld processes Filler metal considerations Joint design considerations Grain structure changes due to heat
Approximate Time In Hours
9.00

Lab
Outline
WELDING CROSSES GMAW SMAW
Approximate Time In Hours
5.00

Lecture
Outline
PORTABILITY OF PROCESSES Code limitations Environmental effects Requirements for weld machine accessories
Approximate Time In Hours
2.50

Lecture
Outline
WELDABILITY OF METALS AND ELEMENTS Ferrous vs non ferrous metals Thin gauge vs structural Choosing filler metal to match base metal
Approximate Time In Hours
5.00

Lecture
Outline
GTAW Set up of equipment and weld torch head Polarity settings Importance of shielding gas - argon Cubic Feet/Hours (CFH) High frequency arc Tungsten shape and grind techniques
Approximate Time In Hours
3.00

Lab
Outline
GTAW 1G POSITIONING Using carbon steel practice, push angle and wire feed technique Tack weld pieces together, aiming for full penetration Consistency on bead size
Approximate Time In Hours
7.50

Lecture
Outline
GTAW puddle control The effects of torch push angle Parameters of work angles CTW distance of tungsten Tungsten shape
Approximate Time In Hours
5.00

Lab
Outline
GTAW ALUMINMUM WELDING Alternating Current (AC) welding Puddle control on metal with heat conducting charateristics Square wave technology control parameters
Approximate Time In Hours
15.00

Lecture
Outline
WELDING PROCESSES - REVIEW Cumalative review of all processes used Joint fit up, metal thickness, and portability considerations for process choice Flux or gas shielding considerations Charateristics of base and filler metal Heats affect on metal
Approximate Time In Hours
6.00

Lab
Outline
PARAMETERS OF TORCH ANGLE ON WELD JOINTS Tee joint Lap joint Various positions
Approximate Time In Hours
5.50

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lab
Safely operate various welding equipment for SMAW. GMAW, and GTAW.

Lecture
Identify the abbreviated symbols used in industry for electrode specifications.

Lecture
Associate the five essentials of welder controls to discontinuites created in weldment.

Lecture
Indentify the effects of too much heat input on weldment.

Lab
Recognize the five common joints used in welding.

Student Learning Outcomes

Upon completion of this course, the student should be able to:
1. By the end of this course, students should have a general understanding of safety in the welding field, basic welding processes, safe set-up and shut down of machinery, the materials used, and filler material requirements.

2. Upon completion, students will understand constant current machines vs. constant voltage machines.

3. Upon completion of this course, students will be able to demonstrate safely the connections for each polarity required for welding on various welding machinery.

Methods of Instruction

Demonstration
Students will be given a visual and hands on demonstration of all welding processes, stemming from equipment safety and set-up, to use and shut-down.

Discussion
Students will have the opportunity to discuss all information offered to them in class, to ask questions and dialogue with the instructor and their peers.

Field trips
Students will have opportunities to visit various companies in the industry to get a better understanding of what companies are requiring from them as potential employees. Also allowing students the chance to be in the atmosphere of companies that hire for what they have been trained in will open their eyes to the industry from a realistic standpoint.

Guest Speakers
Guest speakers from various industry partners will be invited to visit the class to explain their particular needs for employees.

Internet Presentation/Resources
Students will be introduced to each welding process offered through videos and online resources for visual stimulation.

Laboratory
Students will perform welding projects in the welding shop after safety in welding and demonstrations have occurred.

Lecture
Students will be given lectures on the current topics prior to attempting each welding procedure. Instructor will explain step by step the expectations that need to be fulfilled for success in the class.

Methods of Evaluation

Skills demonstrations
Exams/Quizzes
Typical Assignments
Some assignments require critical thinking:
When welding a specific joint or metal thickness, determine the best process to use: SMAW versus GMAW or GTAW.

When approaching a project, taking strength, penetration requirements, visual considerations, or code specifications into consideration, determine when it makes economical sense to prepare a groove or if a fillet weld will suffice. Report conclusions on a one page report.
Other Assignments:
Regarding the effects of heat input created by welding, determine whether to run a single or multipass bead.

Course Materials

Author: Andrew Daniel Althouse, Carl H. Turnquist, William A. Bowditch, Kevin E. Bowditch.
Title: Modern Welding
Edition: 12th ed.
Publisher: Goodheart-Willcox
ISBN-13: 978-1635636864

Year: 2018
Rationale for older textbook:
N/A
Or Equivalent: No
Other:
AWS Welding Journal
Other:
Safety glasses
Welding helmet
Leather gloves
Wire brushes
Chipping hammer

Minimum Qualification

1. Welding
Condition

Standard Course Review - No Proposed Changes – DE Addendum – SPAN 153

Course Information

Course Discipline: SPAN
Course Division: Fine Arts, Communication and Humanities
Course Number: 153
Full Course Title: Spanish for Native Speakers II
Short Title: Spanish for Native Speakers
TOP Code: 110500 - Spanish
SAM Code: E - Non-Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status A - Transferable to both UC and CSU.
Effective Term: Fall 2020
Board of Trustees Approval Date:
2019-08-20

Course Description

This course is designed for students with a native-speaking knowledge of Spanish and who have had some formal instruction in the Spanish language. Students strengthen their cultural and linguistic ability to use correct spoken and written Spanish free from regionalisms and Anglicism. Students master the ability to correct faulty Spanish speech habits, improve

vocabulary, and acquire skills in writing. Students also become familiar with the similarities and differences existing within and between the cultures of Spain and Spanish America.

Course Standards

Lecture Hours:
90.000
Activity Hours:
0.000
Lab Hours:
Outside-of-Class Hours:
180.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
90.000
Activity Hours:
0.000
Lab Hours:

Outside-of-Class Hours:
180.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
5.000
Total Hours:
90.000
Grading Method:
Letter grade only

Course Requirements

Prerequisite
Subject SPAN - Spanish
Requisite Course SPAN 152 - Spanish for Native Speakers I (Active)5.000 - 5.000
Other
Non Course Requirements
equivalent

Course Content

Lecture
Outline
Culture: Central America Overview of the historical, sociopolitical, and cultural past and present of Central America (Nicaragua, Honduras, El Salvador, and Guatemala) with emphasis on the economic and societal consequences of civil wars and natural disasters
Approximate Time In Hours
17.00

Lecture
Outline
Culture: Northern South America Overview of the historical, sociopolitical, and cultural past and present of northern South America (Colombia and Venezuela)
Approximate Time In Hours
15.00

Lecture
Outline
Culture: Andean region of South America Overview of the historical, sociopolitical, and cultural past and present of the Andean region of South America, including Ecuador, Bolivia, and Peru, and the political realities of their indigenous cultures
Approximate Time In Hours
15.00

Lecture
Outline
Culture: Southern South America Overview of the historical, sociopolitical, and cultural past and present of southern South America (Argentina, Chile, Paraguay, and Uruguay) with emphasis on the region's recovery from twentieth century dictatorships to present-day democratic governments
Approximate Time In Hours
15.00

Lecture
Outline
Grammar Structure of paragraphs and multi-paragraph compositions both oral and written1. Imperative tense2. The subjunctive mood to express will, emotion, and doubt3. Future and conditional verb tenses4. Continuation of the subjunctive mood Continued acquisition and expansion of the subjunctive mood with the instruction of the imperfect subjunctive and perfect tenses (indicative and subjunctive) Continuation of the perfect tenses and the

subjunctive mood Intensified acquisition of vocabulary and idiomatic expressions of the countries covered in class Recognition of words in the Spanish language with origins in the indigenous languages of South America Continuation and intensified effort with written phonetic and diacritical accents, as well as spelling corrections
Approximate Time In Hours
28.00

General Education/Transfer

1. **Local GE/Graduation Requirements:**
    1. 3 – Humanities
2. **CSU GE:**
    1. C2 - Humanities
3. **IGETC GE:**
    1. 3B - Humanities
    2. 6 - Language Other Than English (UC Only Requirement)
4. **Transfer and Articulation:**
    1. **C-ID:** SPAN 230
5. **UC TCA:**
    1. UC-H Arts and Humanities

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lecture
Discuss and interpret the major cultural events of Spanish-speaking countries in Central and South America.

Lecture
Demonstrate ability to write Spanish compositions analyzing historical, cultural, and literary aspects of Spain and Spanish-speaking countries in Central and South America.

Lecture
Discuss and infer nuances in cultural similarities and differences existing within and among Spain, Spanish-speaking Latin American countries, and the United States.

Lecture
Use the future and conditional verb tenses correctly, as well as the present perfect and present and imperfect subjunctive moods in Spanish oral and written communication.

Lecture
Use relative pronouns correctly.

Student Learning Outcomes

Upon completion of this course, the student should be able to:
1. SLO # 1 Upon completion of Spanish 153, successful students will converse in Spanish using subjunctive and imperative moods, passive constructions, perfect tenses, and basic vocabulary in the fields of energy, ecology, geography, human rights, politics, and business.

2. SLO # 2 Upon completion of Spanish 153, successful students will read and analyze in Spanish Spanish fiction and non-fiction writings by Spanish-speaking authors such as poems, short stories, essays, and one literary novel.

3. SLO # 3 Upon completion of Spanish 153, successful students will write about and interpret in Spanish historical, cultural, and literary aspects of several Spanish-speaking countries using simple past tense, imperfect tense, perfect tenses, and present and subjunctive moods with an intermediate command of orthography and phonetic and diacritical accents.

4. SLO # 4 Upon completion of Spanish 153, successful students will demonstrate an awareness of the major cultural events of several North, Central and South American Spanish-speaking countries. These events include the rise and fall of the Incan civilization and the struggle for peace in Guatemala and El Salvador.

Methods of Instruction

Discussion
Students are asked to analyze and discuss the cultural themes from each chapter.
Group Activities
Students are given a group project. The project consists of a Spanish current event in which the group has to present in class.
Lecture
The lectures starts with the grammar rules from each chapter. The lesson continues with the cultural component. Third, students have to answer the cultural questions provided by textbook.

Methods of Evaluation

Substantial writing assignments
Exams/Quizzes
Typical Assignments
Some assignments require critical thinking:

Read the one-page Spanish essay we discussed today in class. The essay is written in present tense. Revise the essay by changing the basic Spanish from the present tense to the appropriate past tense. Write the revised essay.

In a two-page essay in Spanish, assess how the clash between the Spanish and pre-Colombian cultures still affects the contemporary world of one of the following Latin American countries: El Salvador, Honduras, Nicaragua, Costa Rica, Colombia, Panama, Venezuela, Peru, Ecuador, Bolivia, Argentina, Uruguay, Paraguay, or Chile. Reflect on how these countries would/could have been different had Spain not occupied these lands. Use the present and imperfect subjuntive moods, as well as the future, present conditional, and past conditional tenses.

Other Assignments:
In a two-page essay in Spanish, explain how the dictatorships in Argentina and Chile during the 1970s continue to have an impact in these countries today.

Course Materials

Author: Jose A Blanco
Title: Galeria 2
Edition: Second
Publisher: Vistas Higher Learning
ISBN-13: 978-1-66992-902-4
Year: 2025
Or Equivalent: No

Minimum Qualification

1. Foreign Languages
Condition

Articulation/Transfer Review – SOCI 207

Course Information

Course Discipline: SOCI
Course Division: Social Sciences
Course Number: 207
Full Course Title: Introduction to Human Services and Social Work
Short Title: Intro to HumServ & Social Wrk
TOP Code: 210400 - Human Services
SAM Code: D - Possibly Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status B - Transferable to CSU only.
Effective Term: Spring 2024
Board of Trustees Approval Date:
2023-12-12

Course Description

This course introduces students to social welfare and societal institutions in the United States. Students will examine social structures and historical influences that shaped social services. Special attention is given to institutions, and service delivery systems along with their policies and procedures. There is emphasis on cultural competence working with various populations. In addition, engaging in ethical practices as a human services practitioner and social worker.

Course Standards

Lecture Hours:
54.000

Activity Hours:
Lab Hours:
Outside-of-Class Hours:
108.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
54.000
Activity Hours:

Lab Hours:

Outside-of-Class Hours:
108.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
3.000
Total Hours:
54.000
Grading Method:
Letter grade only

Course Content

Lecture
Outline
1. Historical evolution of social welfare, human services, and social work in the United States.
Approximate Time In Hours
6.00

Lecture
Outline
2.(A) Differentiate between policies and procedures in social services and social work. Discuss the impact of policies and procedures on various populations using the intersectionality framework. (B) Collaborating, negotiating, and advocating in working with and within social welfare and human service agencies.
Approximate Time In Hours
9.00

Lecture
Outline
3. (A) Current systems in human services and social work in the United States including management principles of human service delivery with various populations. (B) Site visit to evaluate services provided by a local social welfare agency.
Approximate Time In Hours
18.00

Lecture
Outline
4. (A) Ethical standards and values in human services and social work practice. (B) Legal, ethical, and professional practice responsibilities of working with social work and human service organizations with attention to cultural humility working with oppressed groups.
Approximate Time In Hours
3.00

Lecture
Outline
5. (A) Theoretical perspectives in human services and social work. (B) The scientific method in social work and human services. (C) Steps in the scientific method. (D) Research methods used by social workers and human services practitioners. (E) Ethics employed in social scientific inquiry.
Approximate Time In Hours
9.00

Lecture
Outline
6. Roles and orientations in human service and social work practice including cultural competence.
Approximate Time In Hours
9.00

General Education/Transfer

1. **Local GE/Graduation Requirements:**
    1. 2 – Social and Behavioral Sciences

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lecture
1. Examine historical perspectives in human service and social work in the United States.

Lecture
2. Identify and describe social structures that influence human services and social work.

Lecture
3. Identify and be able to uphold the legal, ethical, and professional practice responsibilities of working with social work and human service organizations with attention to cultural humility and oppressed groups.

Lecture
4. Evaluate and discuss case scenarios to demonstrate understanding of cultural competence.

Lecture
5. Discuss social policy analysis perspectives addressing social work and human services through a lens that considers ethnicity, culture, class, age, religion, physical or cognitive abilities, gender identity, sexual orientation, and other potential targets of oppression.

Lecture
6. Identify various populations that receive social services in various settings.

Lecture
7. Evaluate the complexities of the public welfare system that provides services to various populations.

Lecture
8. Differentiate between policies and procedures in social services.

Lecture
9. Demonstrate working knowledge of the codes of ethics in human services and social work.

Lecture
10. Apply various models and frameworks including theories to case scenarios.

Lecture
11. Explain the services provided by a local social welfare agency (Ideally associated with a visit to or volunteer experience).

Student Learning Outcomes

Upon completion of this course, the student should be able to:
1. SLO # 1: Students will describe historical perspectives that shaped human services and social work.

2. SLO # 2: Students will demonstrate understanding of social structures that influence human services and social work.

3. SLO # 3: Students will demonstrate cultural competency in working with various populations.

4. SLO # 4: Students will demonstrate knowledge of the welfare system along with policies and procedures that govern it.

5. SLO# 5: Students demonstrate understanding of ethical practices in human services and social work.

Methods of Instruction

Demonstration
Discussion
Group Activities
Guest Speakers
Internet Presentation/Resources
Lecture

Multimedia presentations
Role Play
Simulation
Methods of Evaluation
Substantial writing assignments
Skills demonstrations
Exams/Quizzes
If you selected "Other", please provide details.
- Students will engage in visiting a local social welfare agency to evaluate the services provided.
Typical Assignments
Some assignments require critical thinking:

- Students will evaluate the welfare system in a county in California. They will explain the complexity of the welfare system and how it impacts the lives of people who need social services. Students will incorporate macro, mezzo, and micro levels of intervention. The paper will be 5-6 pages in length. Students must use APA format.
- Students will use the intersectionality framework to discuss two social policies that address human service delivery. The paper will be 5-6 pages in length. Students must use APA format.
- Students will compare and contrast two theoretical frameworks used in social work. The paper will be 5-6 pages in length. Students must use APA format.
- Students will write a research paper to demonstrate how the scientific method is used in social work and human services. The paper will be 5-6 pages in length. Students must use APA format.

Reading Assignments:

- Class discussions
- Group activities
- Class presentations
- Video analysis
- Guest speakers

Other Assignments:

- Class discussions
- Group activities
- Class presentations
- Video analysis
- Guest speakers

Course Materials

Author: Marianne R. Woodside and Tricia McClam
Title: An introduction to Human Services
Edition: 9th
Publisher: Cengage Learning
ISBN-13: 978-1337567176
Year: 2018
Rationale for older textbook:
N/A
Or Equivalent: No

Author: Michelle Martin
Title: Introduction to Human Services: Through the Eyes of Practice Settings
Edition: 5th
Publisher: Pearson
ISBN-13: 9780136801993
Year: 2022
Rationale for older textbook:
N/A
Or Equivalent: No

Author: Elizabeth A. Segal, Karen E. Gerdes, Sue Steiner
Title: Empowerment Series: An Introduction to the Profession of Social Work
Edition: 6th
Publisher: Cengage Learning
ISBN-13: 9780357694268
Year: 2019
Rationale for older textbook:
This textbook offers the components of human services and social work. The instructor can complement this textbook with open educational resources OER
https://socialsci.libretexts.org/Bookshelves/Social_Work_and_Human_Services
Or Equivalent: No

Author: Jessica Gladden et al.
Title: Social Work and Human Services
Edition: 1st
Publisher: LibreTexts (OER)
ISBN-13: https://socialsci.libretexts.org/Bookshelves/Social_Work_and_Human_Services
Year: 2022
Or Equivalent: No

Course Manual
Author: American Psychological Association
Title: Publication Manual of the American Psychological Association
Edition: 7th
ISBN-13: 978-1433832154
Publisher: APA
Year: 2019
Rationale for older manual:
N/A

Minimum Qualification

1. Sociology
Condition

2. Counseling
Condition

3. Psychology
Condition

Standard Course Review – Revised Conditions of Enrollment – DE Addendum – SPAN 152

Course Information

Course Discipline: SPAN
Course Division: Fine Arts, Communication and Humanities
Course Number: 152
Full Course Title: Spanish for Native Speakers I
Short Title: Spanish for Native Speakers I
TOP Code: 110500 - Spanish
SAM Code: E - Non-Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status A - Transferable to both UC and CSU.
Effective Term: Fall 2020
Board of Trustees Approval Date:
2019-08-20

Course Description

This course is designed for students with a native-speaking knowledge of Spanish and who have little or no formal instruction in the Spanish language. Students develop the cultural and linguistic ability to use correct spoken and written Spanish free from regionalisms and Anglicisms. Students learn to correct faulty Spanish speech habits, improve vocabulary, and acquire skills in writing. Students also become familiar with the similarities and differences existing within and between the cultures of Spain, as well as the Caribbean and North and Central American Spanish-speaking countries.
Course Standards
Lecture Hours:

90.000
Activity Hours:
0.000
Lab Hours:
Outside-of-Class Hours:
180.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
90.000
Activity Hours:
0.000
Lab Hours:

Outside-of-Class Hours:
180.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
5.000
Total Hours:
90.000
Grading Method:
Letter grade only

Course Content

Lecture
Outline
Culture: Spanish United StatesA. Overview of the immigration of Hispanics in the United States,focusing on Mexican-Americans, Puerto Ricans, Cuban-Americans,and DominicansB. Discussion of their challenges and influences in this country thatenable a better understanding of the cultures of most native andheritage speakers of Spanish in the United States
Approximate Time In Hours
16.00

Lecture
Outline
Culture: SpainA. Overview of the culturally diverse historic, sociopolitical past andpresent of SpainB. The permanent impact of Spain's historic and sociopolitical past onSpanish America
Approximate Time In Hours
14.00

Lecture
Outline
Culture: Mexico and GuatemalaA. Overview of the historical, cultural, and sociopolitical past ofMexico and Guatemala1. Significant ancient civilizations during pre-Colombian times2. Post colonial era3. Present-day concerns
Approximate Time In Hours
14.00

Lecture
Outline
Culture: Spanish CaribbeanA. Overview of the historical, cultural, and sociopolitical past dating from pre-Columbian times to the present day of Spanish-speaking Caribbean countries (Puerto Rico, the Dominican Republic, and Cuba)
Approximate Time In Hours
14.00

Lecture
Outline
Grammar: ParagraphsA. Structure of simple paragraphs both orally and written1. Present tense verbs2. Ser vs. estar3. Adjectives4. Comparatives and superlatives5. The preterite verb tense6. Direct and indirect object pronouns7. The infinitive of verbs
Approximate Time In Hours
15.00

Lecture
Outline
Grammar: Multi-paragraph compositions A. Structure of simple compositions both orally and written1. Preterite and imperfect verb tenses2. Possessive adjectives3. Pronouns4. Past participle, passive constructions, and the imperative B. Acquisition of vocabulary and idiomatic expressions of the Hispanic groups covered in classC. Introduction to the written rules of accentuation and spelling challenges of heritage speakers of Spanish
Approximate Time In Hours
17.00

General Education/Transfer

1. **Local GE/Graduation Requirements:**
    1. 3 – Humanities
2. **CSU GE:**
    1. C2 - Humanities
3. **IGETC GE:**
    1. 3B - Humanities
    2. 6 - Language Other Than English (UC Only Requirement)
4. **Transfer and Articulation:**
    1. **C-ID:** SPAN 220
5. **UC TCA:**

1. UC-H Arts and Humanities

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lecture
Summarize the major cultural events of Spain and Spanish-speaking countries in North America, Central America, and in the Caribbean region.
Lecture
Demonstrate ability to write brief compositions on historical, cultural, and literary aspects of Spain and Spanish-speaking countries in North America, in Central America, and in the Caribbean region.

Lecture
Compare and contrast cultural similarities and differences existing within and among Spain, Spanish-speaking countries in North America, Central America, the Caribbean region, and communities in the United States.

Lecture
Demonstrate ability to use present, past, and imperfect verb tenses in oral and written Spanish communication.

Lecture
Use correct and culturally appropriate basic Spanish grammar, such as direct and indirect objects, adjectives, pronouns, and comparatives/superlatives in oral and written communication.

Lecture
Demonstrate ability to write short Spanish compositions using correct spelling and written phonetic and diacritical accents.

Student Learning Outcomes

Upon completion of this course, the student should be able to:
1. SLO # 1 Upon completion of Spanish 152, successful students will converse in Spanish using present tense, simple past tense, imperfect tense, and basic vocabulary in the fields of art, music, film, literature, fashion, sports, and physical fitness.

2. SLO # 2 Upon completion of Spanish 152, successful students will read and summarize in Spanish poems, short stories, and short essays by Spanish-speaking authors.

3. SLO # 3 Upon completion of Spanish 152, successful students will write in Spanish about historical, cultural, and literary aspects of several Spanish-speaking countries and Hispanic communities in the United States using preterite and imperfect verb tenses basic command of orthography and written phonetic and diacritical accents.

4. SLO # 4 Upon completion of Spanish 152, successful students will demonstrate basic awareness of cultural events and topics of Spain, several North, Central, and South American Spanish-speaking countries, and Hispanic communities in the United States. These topics include the first inhabitants of these particular Spanish-speaking countries as well as Latino immigration in English-speaking North
America

Methods of Instruction

Discussion
Students discuss the topic in the textbook.
Group Activities
Students are put in groups to discuss a Spanish and/or Latin American current events.
Lecture
The lectures start with the introduction to the grammar lessons in each chapter. Second, the cultural topic from the chapter are introduce followed by analyzing and answering the lesson's questions.

Methods of Evaluation

Skills demonstrations
Exams/Quizzes
Typical Assignments
Some assignments require critical thinking:
In a one-page essay written in Spanish, compare and contrast the values and beliefs of Mexicans and Americans, and demonstrate how these present conflicts to the Mexican-Americans living in the United States.

In a one-page essay written in Spanish, explain how the clash between the Spanish and pre-Colombian cultures still affects the contemporary world of one of the following Latin American countries: Mexico, Guatemala, Cuba, the Dominican Republic, or Puerto Rico.
Other Assignments:
Read the Spanish paragraph we discussed today in class. The paragraph is written in the present tense. Revise the paragraph by changing the basic Spanish from the present tense to the past tense. Write the revised paragraph.

Course Materials

Author: Jose A Blanco
Title: Galeria 1
Edition: Second
Publisher: Vistas Higher Learning
ISBN-13: 978-1-66992-900-0
Year: 2025
Or Equivalent: No

Minimum Qualification

1. Foreign Languages
Condition

Standard Course Review -- Course Description Update -- Revised Conditions of Enrollment -- DE Addendum – CHEM 102

Course Information

Course Discipline: CHEM
Course Division: Science, Technology, Engineering, and Mathematics (STEM)
Course Number: 102
Full Course Title: Fundamentals of Chemistry
Short Title: Funds of Chem
TOP Code: 190500 - Chemistry, General
SAM Code: E - Non-Occupational
Is this a credit or noncredit course? D - Credit - Degree Applicable
Transfer Status A - Transferable to both UC and CSU.
Effective Term: Summer 2020
Board of Trustees Approval Date:
2020-09-08

Course Description

This course introduces fundamental theory and principles of chemistry applied to inorganic, organic, and biological chemistry. Atomic and molecular structure, chemical and physical changes, gases, solutions, nomenclature, equations, and calculations will be emphasized. *Note: The maximum UC credit allowed for students completing Chemistry 102 and Chemistry 104/104H is one course. Students will not receive UC credit for Chemistry 102 or Chemistry 104/104H if taken after Chemistry 150.

Course Standards

Lecture Hours:
72.000
Activity Hours:
0.000
Lab Hours:
54.000
Outside-of-Class Hours:
144.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:
Lecture Hours:
72.000
Activity Hours:
0.000
Lab Hours:
54.000
Outside-of-Class Hours:
144.000
Min and Max Total Regularly Scheduled Hours of instruction required for student to achieve course objectives:

Min/Max Units:
5.000
Total Hours:
126.000
Grading Method:
Letter grade only

Course Requirements

Other
Non Course Requirements
Elementary Algebra or Intermediate Algebra competency or equivalent

Course Content

Lecture
Outline
Introduction and Nomenclature Intro to Chemistry Problem Solving Units and Measurement Dimensional Analysis Matter Physical and chemical properties Elements Nomenclature Binary nonmetal compounds Salts Acids and bases
Approximate Time In Hours
8.00

Lecture
Outline
Chemical Calculations Mole concept Chemical Equations Balancing Classifying Writing Stoichiometry Solutions Molarity Mass percent Solution stoichiometry including dilution and titrations
Approximate Time In Hours
8.00

Lecture
Outline
Atomic Structure Atomic theory Bohr atom Valence electrons Use of periodic table Octet rule
Approximate Time In Hours
4.00

Lecture
Outline
Periodicity Periodic table Trends Atomic size Ionization energy Electronegativity
Approximate Time In Hours
2.00

Lecture
Outline
Chemical Bonding Ionic bonding Covalent bonding Polar and non-polar bonds Lewis Structures Octet rule Multiple bonds
Approximate Time In Hours
5.00

Lecture
Outline
Molecular Geometry Lewis structures and shapes Valence Shell Electron Pair Repulsion Theory
Approximate Time In Hours
3.00

Lecture
Outline
States of Matter: Gases Properties Gas laws Boyle, Charles, Avogadro, Gay-Lussac, Combined Partial pressures Kinetic Molecular Theory
Approximate Time In Hours
4.00

Lecture
Outline
States of Matter: Liquids and solids Intermolecular forces Properties Relative energy of solids, liquids, and gases
Approximate Time In Hours
2.00

Lecture
Outline
Solutions Concentration units Factors affecting solubility Colligative properties Vapor pressure Boiling point Freezing point Osmotic pressure
Approximate Time In Hours
6.00

Lecture
Outline
Acids and Bases Arrhenius theory Bronsted-Lowry theory
Approximate Time In Hours
3.00

Lecture
Outline
Reactions in aqueous solutions Electrolytes - Classification Oxidation - Reduction Oxidation numbers Oxidizing and reducing agents
Approximate Time In Hours
3.00

Lecture
Outline
Organic Chemistry Classification Alkanes Alkenes Alkynes Alcohols Ethers Esters Carboxylic Acids Amines Aldehydes and Ketones Haloalkanes Nomenclature Common IUPAC Physical Properties Isomers Structural Geometric Stereoisomers Reactions Substitution Addition Redox
Approximate Time In Hours
12.00

Lecture
Outline
Biochemistry Classification Carbohydrates Lipids Proteins Structure and Properties Physical properties Structural formulas Chemical properties
Approximate Time In Hours
12.00

Lab
Outline
Laboratory Experiments - 12-14 from the following list. Starred ones are considered mandatory for all students: Use of Bunsen Burners Measurement and Density* Titration Properties of Acids and Bases* Graphing Enthalpy of fusion of water Hydrocarbons* Charles' Law* Preparation of Aspirin Organic oxidation reactions Simple Chemical Reactions* Hydrates Electrolytes and Nonelectrolytes Combined Gas Law* Acid-Base Indicators Organic Functional Groups* Preparation of Soaps Fats, Proteins, and Carbohydrates Compounds and Mixtures* Lewis Structures and Molecular Shape*
Approximate Time In Hours
54.00

General Education/Transfer

1. **Local GE/Graduation Requirements:**
    1. 1 – Natural Sciences
2. **CSU GE:**
    1. B1 - Physical Sciences
    2. B3 - Laboratory Activity
3. **IGETC GE:**
    1. 5A - Physical Science with Lab
    2. 5A - Physical Science
    3. 5C - Lab
4. **UC TCA:**
    1. UC-S Physical and Biological Sciences

Course Objectives

Upon successful completion of the course, the student will demonstrate the ability to:
Lecture
Use chemical terminology to name inorganic chemical compounds, formulas and reactions and classify types of chemical reactions. Perform stoichiometric calculations involving chemical reactions.

Lecture
Use atomic theories to interpret the structure of an atom. Predict and explain periodic trends based on atomic structure and the periodic table. Describe and illustrate the structure and bonding for molecules using Lewis structures, molecular geometry and polarity.

Lecture
Use the Kinetic Molecular Theory to explain the behavior of gases and perform calculations involving gas laws. Relate intermolecular forces to observed properties of solids, liquids and gases.

Lecture
Explain solubility qualitatively in terms of properties of both solute and solvent. Determine concentrations of solutions. Give qualitative descriptions of colligative properties as a function of solute type and concentration. Classify solute behavior in solution as strong, weak or non-electrolytes and apply to net ionic equations.

Lecture
Compare and contrast Arrhenius and Bronsted-Lowry acid theories. Write acid-base reactions and determine the pH of aqueous solutions. Demonstrate an understanding of how a buffer works.

Lecture
Determine oxidation numbers for compounds alone and in a chemical reaction. Identify the elements being oxidized and reduced in a redox reaction.

Lecture
Use common and IUPAC systems to name various classes of organic compounds, and draw structural formulas for these compounds based on their names. Write equations for selected common reactions of organic compounds. Compare and contrast structural and geometric isomers.

Lecture
Demonstrate an understanding of the concept of chirality by drawing Fischer projections of enantiomers which contain at least one chiral carbon.

Lecture
Draw structural formulas for common monosaccharides. Describe the linkage between monosaccharide units in terms of bonding. Compare common di- and polysaccharides.

Lecture
Draw general structural formulas for fatty acids, triglycerides, steroids and phospholipids. Compare and contrast saturated fatty acids and unsaturated fatty acids. Explain the function of fatty acids in a membrane.

Lecture
Determine the structure of amino acids at physiological pH and in zwitterion form. Describe the peptide linkage between amino acids in a protein in terms of geometry and resonance. Identify features of primary, secondary and tertiary structure in a protein. Explain denaturation as it applies to a biological system.

Lab
Demonstrate the ability to use basic laboratory skills such as taking and recording observations of chemical systems and interpreting qualitative and quantitative experimental data.

Student Learning Outcomes
Upon completion of this course, the student should be able to:
1. In a written exercise, given the chemical formulas of reactants, write the correct formulas of products, identify the reaction type and balance the equation.

2. Create (via molecular models or drawings) accurate representations of compounds. The representations will contain appropriate bonds, lone pairs, and geometry.

3. Adhere to safety protocol in the laboratory regarding eye protection. Students will follow the proper procedure regarding wearing goggles in the laboratory, and keeping them on to protect their eyes.

Methods of Instruction
Demonstration
The instructor will demonstrate how a chemical reaction occurs by mixing two solutions. A solution of lead (II) chloride with a solution of silver nitrate. The students will then predict the product, write the balanced chemical equation.
Discussion

The instructor will discuss how Lewis structures, molecular shape and molecular polarity affect the solubility of solutes in a given solution.

Laboratory
Students will study the properties of hydrocarbons: their odor, melting and boiling point, as well as their solubilities. These properties will be compared to those of inorganic compounds, such as NaCl.

Lecture
Cover the topic of nomenclature and have several group activities to emphasize the concepts.

Multimedia presentations
PowerPoint presentations and videos will be used to illustrate the concepts and techniques used in chemistry.

Methods of Evaluation

Problem solving demonstrations (computational or non-computational)
Exams/Quizzes
Typical Assignments
Some assignments require critical thinking:
A sample of gas with a volume of 20.5 L at a temperature of 35.8 oC and a pressure of 2.00 atm. If the pressure and temperature changed to STP, then what is the volume of the gas?

A 50.0 g sample of an unknown metal requires 300.0 kcal to change its temperature from 0.0 degrees C to 100.0 degrees C. What is the specific heat of the metal in calories/gram * degree Celsius? Show all calculations in the space provided.
Other Assignments:
A certain brand of beer has a pH of 5.0. Calculate the concentration of hydrogen ions in moles per liter. Is the beer acidic or basic? Show all calculations in the space provided.

Course Materials

Author: Denniston, Topping, Quirk
Title: ISE General, Organic, and Biochemistry
Edition: 11th
Publisher: McGraw Hill
ISBN-13: 978-1265138462
Year: 2022
Or Equivalent: No

Author: McMurry et al.
Title: Fundamentals of General, Organic, and Biological Chemistry
Publisher: LibreText
Year: 2024
Or Equivalent: No

Author: Compton College Chemistry Department
Title: Chemistry 102 Lab Manual
Edition: 1st
Publisher: Compton College Chemistry
Year: 2020
Or Equivalent: No

Other:
Scientific Calculator
Other:
Safety Goggles

Minimum Qualification

1. Chemistry

College Curriculum Committee Roster		Semester Term Began	Semester Term Ends
3-year terms			
Voting Members			
Adjunct Faculty At Large	Victoria Martinez	Fall 2023	Spring 2026
BIS Faculty Member (1)	Ahmad Manzoor	Spring 2024	Fall 2026
BIS Faculty Member (2)	Michael Vanoverbeck	Fall 2024 2nd term	Spring 2027
FACH Faculty Member (1)	Stefani Baez	Fall 2024	Spring 2027
FACH Faculty Member (2)	Susan Johnson	Spring 2023	Fall 2025
HPS Faculty Member (1)	Arneshia Bryant-Horn	Fall 2023	Spring 2026
HPS Faculty Member (2)	Shay Brown	Spring 2024 2nd term	Fall 2026
STEM Faculty Member (1)	Jose Martinez	Spring 2024	Fall 2026
STEM Faculty Member (2)	Vacant		
Social Sciences (1)	Kendahl Radcliffe	Fall 2023	Spring 2026
Social Sciences (2)	Nathan Lopez	Fall 2024 2nd term	Spring 2027
Dean	Paul Flor	Spring 2021 (extended term)	Spring 2025
Division Chair	David McPatchell	Fall 2022	Spring 2025
Faculty Counselor (1)	Noemi Monterroso	Fall 2024	Spring 2027
Student Learning Outcomes Coordinator	Jesse Mills	Spring 2024	TBD
Distance Education Faculty Coordinator	Bradfield Conn	Fall 2022	TBD
Full-time Librarian (FACH)	Lynn Chung	Fall 2023	Spring 2026
Non-Voting Members			
Articulation Officer	Melain McIntosh	N/A	
Vice President of Academic Affairs/CIO	Sheri Berger	N/A	
Curriculum Analyst	Maya Medina	N/A	
Student Representative	Shante Mumford	Spring 2024	
Academic Senate Secretary	Noemi Monterosso		
Tie-Breaking Vote Only			
College Curriculum Committee Chair	Charles Hobbs	Fall 2024	Spring 2026

Curriculum Committee Meeting Schedule

Curriculum Committee Meeting Schedule 2024-2025		
Date	Time	Location—In Person
~~1. Sept 10, 2024~~	~~2:00 p.m. – 3:30 p.m.~~	~~VT-124~~
~~2. Sept 24, 2024~~	~~2:00 p.m. – 3:30 p.m.~~	~~VT-124~~
~~3. Oct 8, 2024~~	~~2:00 p.m. – 3:30 p.m.~~	~~VT-124~~
~~4. Oct 22, 2024~~	~~2:00 p.m. – 3:30 p.m.~~	~~VT-124~~
5. Nov 12, 2024	2:00 p.m. – 3:30 p.m.	VT-124
6. Nov 26,2024	2:00 p.m. – 3:30 p.m.	VT-124
7. Dec 10, 2024	2:00 p.m. – 3:30 p.m.	VT-124
8. Feb 25, 2025	2:00 p.m. – 3:30 p.m.	VT-124
9. Mar 11, 2025	2:00 p.m. – 3:30 p.m.	VT-124
10. Mar 25, 2025	2:00 p.m. – 3:30 p.m.	VT-124
11. Apr 8, 2025	2:00 p.m. – 3:30 p.m.	VT-124
12. Apr 22, 2025	2:00 p.m. – 3:30 p.m.	VT-124
13. May 13, 2025	2:00 p.m. – 3:30 p.m.	VT-124
14. May 27, 2025	2:00 p.m. – 3:30 p.m.	VT-124
15. Jun 10, 2025	2:00 p.m. – 3:30 p.m.	VT-124