

CHEMISTRY

CHEM 100 Chemistry and Man (3) KCC AA/DP and KCC AS/NS

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in MATH 82 or qualification for a higher-level mathematics course or one year of a high school level algebra course.

Recommended Preparation: Two years of a high school level algebra course or MATH 103 or a higher-level mathematics course.

CHEM 100 is a survey of the basic concepts of general chemistry. CHEM 100 serves as a preparatory course for more advanced chemistry courses.

Upon successful completion of CHEM 100, the student should be able to:

1. Utilize the scientific method of inquiry.
2. Solve metric-to-English conversion problems and vice versa.
3. Convert within the metric system.
4. Solve algebraic equations related to chemistry.
5. Use algebraic and/or dimensional analysis methods to solve chemistry problems.
6. Apply the rules for significant figures to calculations.
7. Classify matter.
8. Convert between temperature scales.
9. Perform calculations related to density, specific gravity, specific heat, kinetic energy, electromagnetic radiation, and chemical bonding.
10. Perform calculations related to the mole concept.
11. Balance a chemical equation.
12. Calculate, when given a balanced chemical equation and the moles of a reactant, the moles of a product produced in the reaction.
13. Calculate, when given a balanced chemical equation and the weight of a reactant, the weight of a product produced in a reaction.
14. Identify the type of chemical bonds possessed by a molecule or compound.
15. Memorize the symbols of 35 elements, 15 polyatomic ions and the prefixes mono- through deca- (i.e. 1 through 10).
16. Describe the atomic structure of the atom at a minimum according to the Bohr Theory.
17. Describe the shape of S and P orbitals.
18. Use the periodic table to delineate for A group atoms the number of protons, neutrons, electrons, number of outer shell electrons, ion charge, ion symbol, the inert gas the ion is isoelectronic with, and final characterization as either a metal, nonmetal, or metalloid.
19. Glean and use information from the periodic table.
20. Calculate the atomic weight of an atom.
21. Describe what occurs during absorption and emission of radiation by molecules and atoms.
22. Distinguish between physical and chemical properties and changes.
23. Distinguish between endothermic and exothermic reactions.
24. Discuss the laws of chemistry.
25. Write formulas for compounds and molecules.
26. Name compounds and molecules.
27. Calculate the percent composition of a compound.
28. Calculate the empirical and molecular formula of a compound.
29. Draw electron-dot structures for molecules.
30. Define an acid and a base.
31. Distinguish between weak and strong acids and bases.
32. Explain chemical equilibrium.
33. Calculate the pH and pOH of a solution.
34. Calculate $[H^+]$ or $[OH^-]$ given K_w .
35. Explain the relationships between gas solubility and temperature and pressure.
36. Explain the relationship between the solubility of an ionic solid and temperature.
37. Calculate the concentration of a solution in percent and molarity.

CHEM 161 General Chemistry I (3) KCC AA/DP and KCC AS/NS

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in MATH 103.

Recommended Preparation: MATH 135.

Comment: CHEM 161 is suitable for students planning careers in science, engineering, nursing, or other areas of study that require a general chemistry course. Normally this course is followed in sequence by CHEM 162. Students who wish to take a lab course should enroll in CHEM 161L.

CHEM 161 is the first course in a two-semester sequence of general chemistry. CHEM 161 introduces the basic principles of chemistry including the metric system, atomic and molecular structure, periodic trends and chemical bonding, the mole concept, writing and balancing chemical equations, stoichiometry and heat of reactions. The course was designed to provide the student with an adequate background in the fundamental concepts of chemistry. Problem solving is emphasized.

Upon successful completion of CHEM 161, the student should be able to:

1. Use the metric system and scientific notation.
2. Characterize matter based on physical and chemical properties and changes.
3. Explain a variety of conceptual models used in describing atomic and molecular structure, and chemical bonding.

CHEM 161L General Chemistry I Lab (1) KCC AA/DY

3 hours lab per week

*Prerequisite(s): A grade of "C" or higher in MATH 103 **and** credit or concurrent enrollment in CHEM 161.*

Recommended Preparation: MATH 135.

Comment: Students must have a basic scientific calculator with Log and Ln functions. Letter grade and credit/no credit only. CHEM 161L may not be audited.

CHEM 161L is an optional laboratory course that accompanies CHEM 161 lecture. Experiments are performed which relate to the lecture material in CHEM 161. The student will develop practical laboratory skills and achieve a satisfactory level of competency in using laboratory equipment. The student will view first-hand some of the chemical principles and laws of chemistry that are discussed in lecture. The student will use the scientific method of inquiry. CHEM 161L develops practical laboratory skills. Topics may include density, specific gravity, specific heat, chemical and physical properties, analysis of a mixture, and molecular structure.

Upon successful completion of CHEM 161L, the student should be able to:

1. Conduct basic laboratory experiments with proper laboratory techniques.
2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
3. Make careful and accurate experimental measurements and observations.
4. Interpret laboratory results and experimental data, and reach logical conclusions.
5. Relate physical observations and measurements to theoretical principles.

CHEM 162 General Chemistry II (3) KCC AA/DP and KCC AS/NS

3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in CHEM 161 **and** a grade of "C" or higher in MATH 103.*

Recommended Preparation: MATH 135.

Comment: A basic scientific calculator that has Log and Ln functions is needed for CHEM 162.

CHEM 162 introduces additional basic principles of chemistry including kinetics, equilibrium, PH, redox reactions, electrochemistry, acid-base chemistry, gas laws, electrolytes, thermodynamics, and matter and changes of state.

Upon successful completion of CHEM 162, the student should be able to:

1. Solve problems involving all equilibrium constants.
2. Solve problems involving pH and pOH of aqueous solutions.
3. Solve problems involving different solution concentrations.
4. Solve problems involving cell voltages for voltaic and electrolytic cells.
5. Solve problems involving reactant concentrations and reaction rate.
6. Solve problems involving gas laws.

CHEM 162L General Chemistry II Laboratory (1) KCC AA/DY

3 hours lab per week

*Prerequisite(s): A grade of "C" or higher in CHEM 161 **and** a grade of "C" or higher in CHEM 161L **and** credit or concurrent enrollment in CHEM 162 **and** a grade of "C" or higher in MATH 103.*

Recommended Preparation: MATH 135.

CHEM 162L develops additional practical laboratory skills. Topics may include chemical equilibrium, solution chemistry, pH and pK, free energy of a reaction, determination of the molecular weight of a gas, and solution chemistry.

Upon successful completion of CHEM 162L, the student should be able to:

1. Demonstrate approved techniques in handling laboratory equipment for pH measurements, kinetics, titration, and thermochemistry.
2. Record data accurately and in proper form on the lab report sheets.
3. Use measurements to calculate descriptive properties of matter such as: ionization constants, solubility product constants, pH, degree of hydrolysis, and rates of reactions.

CHEM 272 Organic Chemistry I (3) KCC AA/DP

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHEM 162.

Comment: CHEM 272 is intended for science majors.

CHEM 272 is the first semester of a comprehensive introduction to organic chemistry including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Upon successful completion of CHEM 272, the student should be able to:

1. Explain the nature of bonding and structure.
2. Explain the physical properties associated with molecular structure.
3. Give common and IUPAC names for the various organic compounds studied in the first semester.
4. Give complete structures from the names.
5. Draw stereochemical structures and understand how stereochemistry affects physical and chemical properties.
6. Determine the structure of compounds from experimental data including the various spectroscopic techniques.
7. Explain how functional group structure determines chemical reactivity.
8. Determine the mechanism of a reaction based upon the structure of the functional group.
9. Give the types of reactions possible for each functional group and be able to draw all possible products of a reaction.
10. Determine what starting materials are necessary to synthesize a particular compound.
11. Cite examples of organic mechanisms in biology.

CHEM 272L Organic Chemistry Lab I (2) KCC AA/DY

4 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in CHEM 162 and credit or concurrent enrollment in CHEM 272.

Comment: CHEM 272L is intended for science majors.

CHEM 272L is a comprehensive introduction to laboratory principles of organic chemistry including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Upon successful completion of CHEM 272L, the student should be able to:

1. Gain competency using organic laboratory equipment.
2. Gain competency with organic laboratory procedures.
3. Give IUPAC names for the various organic compounds studied in Chemistry 272.
4. Describe how functional group structure determines chemical reactivity.
5. Determine the mechanism of a reaction based upon the structure of the functional group.
6. Be able to draw all possible products of a reaction.
7. Determine what starting materials are necessary to synthesize a particular compound.
8. Explain how physical properties are used to isolate organic compounds.
9. Explain the processes utilized in the design of organic synthesis, and to communicate these using a flow diagram.
10. Be able to record observations and procedures in a laboratory notebook, and to clearly communicate results and conclusions.

CHEM 273 Organic Chemistry II (3) KCC AA/DP

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHEM 272.

Comment: CHEM 273 is intended for science majors.

CHEM 273 is the second semester of a comprehensive introduction to organic chemistry including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Upon successful completion of CHEM 273, the student should be able to:

1. Explain the nature of bonding and structure.

2. Explain the physical properties associated with molecular structure.
3. Give common and IUPAC names for the various organic compounds studied in the first and second semesters.
4. Give complete structures from the names.
5. Draw stereochemical structures and describe how stereochemistry affects physical and chemical properties.
6. Determine the structure of compounds from experimental data including the various spectroscopic techniques.
7. Explain how functional group structure determines chemical reactivity.
8. Determine the mechanism of a reaction based upon the structure of the functional group.
9. Give the types of reactions possible for each functional group and be able to draw all possible products of a reaction.
10. Determine what starting materials are necessary to synthesize a particular compound.
11. Cite examples of organic mechanisms in biology.

CHEM 273L Organic Chemistry Lab II (1) KCC AA/DY

3 hours lab per week

Prerequisite(s): A grade of "C" or higher in CHEM 272L and credit or concurrent enrollment in CHEM 273.

Comment: CHEM 273L is intended for science majors.

CHEM 273L is a continuation of a comprehensive introduction to laboratory principles of organic chemistry including molecular structure, nomenclature, stereochemistry, spectroscopy, reactions and reaction mechanisms, synthesis, and applications to biology.

Upon successful completion of CHEM 273L, the student should be able to:

1. Gain competency using organic laboratory equipment.
2. Gain competency with organic laboratory procedures.
3. Give IUPAC names for the various organic compounds studied in Chemistry 273.
4. Describe how functional group structure determines chemical reactivity.
5. Determine the mechanism of a reaction based upon the structure of the functional group.
6. Be able to draw all possible products of a reaction.
7. Determine what starting materials are necessary to synthesize a particular compound.
8. Explain how physical properties are used to isolate organic compounds.
9. Explain the processes utilized in the design of organic synthesis, and to communicate these using a flow diagram.
10. Be able to record observations and procedures in a laboratory notebook, and to clearly communicate results and conclusions.
11. Determine the structure of compounds from experimental data including various spectroscopic techniques.

CHINESE

CHNS 101 Elementary Mandarin I (4) KCC AA/HSL

4 hours lecture per week

CHNS 101 is designed for students beginning to study the Chinese language. CHNS 101 introduces the basic structures of the Mandarin Chinese language with emphasis on listening, speaking, reading and writing skills. Students will gain these four skills in standard Mandarin Chinese, attaining approximately the Novice-High level on the ACTFL-ETS (American Council on the Teaching of Foreign Languages) proficiency scale.

Upon successful completion of CHNS 101, the student should be able to:

1. Listen and know the meaning of short, learned utterances and some sentence-length utterances, especially where context supports understanding and speech is clear. Comprehend limited vocabulary and some simple questions/statements about family members, age, address, time, interests, and other daily activities.
2. Speak short statements and ask simple questions, primarily by relying on memorized utterances but occasionally by expanding these through simple recombinations of those elements.

3. Read and identify a limited number of character components and high-frequency characters in areas of immediate need. Read for instructional and directional purposes, standardized messages, such as some prices in stores, time/date on schedules, etc. where specific characters and combinations have been memorized.
4. Write simple fixed expressions and limited memorized material and some recombination thereof. Supply information on simple forms and documents. Write names, numbers, dates, own nationality, and other simple autobiographical information as well as some short phrases and simple sentences.

CHNS 102 Elementary Mandarin II (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): CHNS 101 or satisfactory score on language placement test.

CHNS 102 is a continuation of CHNS 101. The four skills of listening, speaking, reading, and writing in standard Mandarin Chinese are further developed. Students will gain these four skills, attaining approximately the Intermediate-low level on the ACTFL-ETS (American Council on the Teaching of Foreign Languages) proficiency scale.

Upon successful completion of CHNS 102, the student should be able to:

1. Understand sentence length utterances that consist of recombination of learned utterances on a variety of topics. Content refer primarily to basic personal background and needs, social conversations and some complex tasks.
2. Handle successfully a variety of uncomplicated task oriented and social functions. Can ask and answer questions participate in simple conversations on topics beyond the most immediate needs.
3. Read consistently with increased understanding simple connected texts dealing with basic personal and social needs. Student will have sufficient comprehension to understand some authentic material as it reflects similarity to specially prepared material and/or to high frequency oral vocabulary and structure.
4. Meet a number of practical writing needs. Can write short simple letters. Content involves personal preference, daily routine, everyday events, and other topics grounded in personal experience. Evidence of control of the syntax of non-complex sentences. Can create a collection of sentences on a given topic.
5. List some essential points of Chinese geography, society, and culture.

CHNS 201 Intermediate Mandarin I (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHNS 102 or satisfactory score on language placement test or consent of instructor.

CHNS 201 is a continuation of CHNS 102. The four skills of listening, speaking, reading and writing in Standard Mandarin Chinese are further developed. Students will gain these four skills, attaining approximately the Intermediate-Mid level on the ACTFL-ETS (American Council on the Teaching of Foreign Languages) proficiency scale.

Upon successful completion of CHNS 201, the student should be able to:

1. Demonstrate listening proficiency in sentence-length utterances pertaining to a wide range of topics relating to daily life (including school, lodging/living quarters, eating out, shopping, dating, computer, internet, and work.)
2. Perform orally a wide range of task-oriented and social functions pertaining to such topic areas as those mentioned above, participating fully in casual conversations.
3. Identify key facts and some details in descriptive reading material covering daily life, news events, and carefully written personal communications. Comprehend a wide range of authentic texts covering basic personal and social needs, such as signs, public announcements, and short, straightforward instructions dealing with public life.
4. Write short simple letters concerning school experiences as well as social events.

CHNS 202 Intermediate Mandarin II (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHNS 201 or satisfactory score on language placement test or consent of instructor.

CHNS 202 is a continuation of CHNS 201. The four skills of listening, speaking, reading and writing in Standard Mandarin Chinese are further developed. Students will gain these four skills, attaining approximately the Intermediate-High level on the ACTFL/ETS (American Council on the Teaching of Foreign Languages) proficiency scale.

Upon successful completion of CHNS 202, the student should be able to:

1. Listen and sustain understanding over longer stretches of connected discourse on a number of topics pertaining to different times and places.
2. Speak and handle successfully most uncomplicated communicative tasks and social situations. Initiate, sustain and close a general conversation with a number of strategies appropriate to a range of circumstances and topics.

3. Read consistently with full understanding of simple connected texts dealing with basic personal and social needs about which the student has personal interest and/or knowledge.
4. Write and meet most practical writing needs and limited social demands. Take notes in some detail on familiar topics and respond in writing to personal quotations. Write simple letters, brief synopses and paraphrases, summaries of biographical data, work and school experience.

CHNS 290 Chinese Language and Culture through Application (4) KCC AA/DH and KCC AA/HSL

3 hours lecture, 3 hours lab per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100. Students must be native, bilingual speakers of Chinese, or advanced level Chinese speaking students with consent of instructor.

Comment: CHNS 290 is designed for native speakers, bilingual and advanced level Chinese speaking students who are qualified to take ENG/ESL 100. Consent of instructor is required.

CHNS 290 is designed to prepare students to serve as Chinese language and culture resources on campus and in the community through service learning experiences. Application of the “real world” community service experiences, cultural readings, and personal reflections will serve as the basis for communicative activities in class.

Upon successful completion of CHNS 290, the student should be able to:

1. Describe the diversity and variety of Chinese culture orally and in writing through service learning community experiences, class discussions, oral presentations, group projects, and papers.
2. Demonstrate the job-related skills gained from practical work experience in the supervised community volunteer activities.
3. Evaluate orally and in writing the service learning activities using appropriate vocabulary and grammar in communicative activities, discussions, and writing activities.
4. Describe orally in classroom discussion, and in reflective journals and essays, the needs of the community.
5. Apply orally and in writing critical thinking and problem-solving skills related to course content and service-learning experiences.
6. List similarities and differences between Chinese and U.S. culture from various perspectives and values.
7. Construct a relationship between language learning and culture.
8. Communicate effectively in both the students' heritage and U.S. cultures.

CIVIL ENGINEERING

CE 270 Applied Mechanics I (3) KCC AA/DP

3 hours lecture per week

Prerequisite(s): A grade of “C” or higher in PHYS 170 and credit or concurrent enrollment in MATH 231.

CE 270 is the study of equilibrium of rigid bodies under the action of forces and the application of the principles of mechanics to solve static problems in engineering.

Upon successful completion of CE 270, the student should be able to:

Solve problems to demonstrate an understanding of forces, resultants, equilibrium, trusses, frames, machines, centroids, moments of inertia, friction, and internal forces/moments.

1. Utilize analytical reasoning to analyze engineering structures subjected to concentrated loads, distributed loads, and frictional forces.
2. Utilize numerical techniques to investigate the design of engineering structures.
3. Conduct background research into the design of an engineering structure, and communicate results via a written report.

CE 271 Applied Mechanics II (3) KCC AA/DP

3 hours lecture per week

Prerequisite(s): A grade of “C” or higher in CE 270 and credit or concurrent enrollment in MATH 232.

CE 271 is the study of the dynamics of particles and rigid bodies under the action of forces: the geometric description of motion and the effects of forces on the motion of bodies.

Upon successful completion of CE 271, the student should be able to:

1. Solve problems to demonstrate knowledge of kinetics analysis methods: force-acceleration, work-energy, and impulse-momentum.
2. Utilize analytical reasoning to describe the kinematics of particles or rigid bodies in various curvilinear coordinate systems.
3. Utilize numerical techniques to investigate the design of dynamic engineering systems of particles or rigid bodies.
4. Conduct background research into the implementation of kinetics analysis methods, and communicate results via written report.

COMMUNICATION

COM 201 Introduction to Communication (3) KCC AA/DS and KCC AS/SS

3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 or qualification for ENG 160 or qualification for ESL 100.

COM 201 presents an overview of communication focusing on the processes of interpersonal, intercultural, organizational, and international communication and on recent developments in multimedia, mass media, and telecommunications.

Upon successful completion of COM 201, the student should be able to:

1. Describe the human communication process, its purposes, functions and modes.
2. Identify and explain verbal and non- verbal codes.
3. Explain the role and dynamics of communication in relationships, groups, and organizations.
4. Analyze the processes and identify the pitfalls of interethnic and intercultural communication, including interactions in Hawai'i, Oceania and Asia.
5. Describe the role of mass and public communication systems in modern societies.
6. Identify and explain the functions and methods of telecommunication in a global society.
7. Express clearly in writing ideas and opinions about communication theories, based on critical analyses of readings and other sources of data.

COMMUNITY HEALTH WORKER

CHW 100 Community Health Worker Fundamentals (3)

3 hours lecture per week

CHW 100 provides an introduction to the role of the community health worker within the larger framework of public health including a focus on self-exploration as an essential part to the promotion of health and disease prevention for clients.

Upon successful completion of CHW 100, the student should be able to:

1. Describe CHW practice settings, roles, scope of practice and relationships within current healthcare restructuring.
2. Explore personal attitudes, beliefs and behaviors that could support or hinder the ability to perform effectively as a community health worker.
3. Explain the influence of culture, values, attitudes, and behavior on community health work with diverse populations.
4. Identify the legal and ethical responsibilities of community health workers and their influence on the care of clients.
5. Develop a basic understanding of other healthcare roles and how the CHW operates as part of the larger healthcare team.
6. Define advocacy and collective planning and how it influences individual and community capacity building.
7. Identify strategies that assist in gathering information about community resources, local health issues, and cultural beliefs.
8. Define outreach and identify ways to connect with community.
9. Describe how cultural beliefs influence the delivery of service to clients.
10. Demonstrate use of relevant language, respectful attitudes and cultural knowledge in approaching diverse clients and their families.

CHW 130 Introduction to Counseling and Interviewing (3)

3 hours lecture per week

CHW 130 offers a basic introduction to the theory and practice of counseling and motivational interviewing skills that CHWs need for establishing trusting relationships and promoting readiness for behavior change across diverse populations. This course is a combination of didactic and experiential learning with a focus on assessment, intervention and outcomes.

Upon successful completion of CHW 130, the student should be able to:

1. Compare and contrast the Person-In-Environment and Strengths Perspective to problem oriented perspectives in counseling.
2. Describe, demonstrate and evaluate basic attitudes, skills and knowledge in interviewing and counseling.
3. Identify and demonstrate attitudes and skills that contribute to cultural sensitivity in interviewing and counseling.
4. Identify personal and ethical assumptions, barriers and competencies related to the provision of effective interviewing and counseling services.
5. Utilize person-centered and brief counseling theories in combination with motivational interviewing to facilitate health and other lifestyle-related behavior changes.

CHW 135 Health Promotion and Disease Prevention (3)

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHW 100 and a grade of "C" or higher in CHW 130; or consent of instructor.

Comment: CHW requires the consent of the instructor to enroll.

CHW 135 explores the role community health workers play in health promotion and disease prevention. Introduces the major causes of premature mortality and morbidity, behavioral and environmental contributions to illness and injury, and strategies for promoting health, wellness and risk reduction. Provides opportunities to practice developing and teaching health promotion/disease prevention classes.

Upon successful completion of CHW 135, the student should be able to:

1. Identify how the social determinants of health impact the individual, family and community.
2. Explain theoretical models for behavior change and how they apply to health promotion efforts.
3. Collect client data specific to healthy behaviors, safety and psychosocial issues.
4. Develop information for clients based on individual needs and desires.
5. Practice constructing and implementing contracts with clients that promote self-responsibility for achieving health goals using motivational interviewing.
6. Identify the components of health education including learning styles and develop a variety of teaching strategies with clients.
7. Practice developing health promotion activities that address individual and community needs.

CHW 140 Case Management (3)

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CHW 100 and a grade of "C" or higher in CHW 130 and a grade of "C" or higher in CHW 135.

Comment: CHW requires the consent of the instructor to enroll.

CHW 140 provides an overview of concepts and practice skills surrounding case management with unique community populations. Focus includes the importance and ability of the CHW to gather, document and report on client visits and other activities. The concepts of individual and community capacity building, cultural competence, professional ethics and boundaries, and active listening skills will be applied to the practice of case management.

Upon successful completion of CHW 140, the student should be able to:

1. Apply case management concepts to identify and describe the special needs and characteristics of particular communities (at risk, underserved, hard to reach, vulnerable).
4. Identify and demonstrate appropriate use of screening tools for vulnerable populations.
5. Identify, demonstrate and evaluate the attitudes, skills and knowledge required to effectively engage individuals in case management services.
6. Explain and apply professional, ethical and cultural considerations in case management.
7. Recognize appropriate follow-up and documentation responsibilities in case management.
8. Demonstrate the ability to work as an effective member of a care coordination team through class activities.

CHW 145 Community Health Worker Practicum (3)

8 hours clinical per week

Prerequisite(s): A grade of "C" or higher in CHW 140.

CHW 145 provides 120 hours of supervised practical experience that allows the CHW student to apply the concepts and skills developed from classroom experience to the unique needs of their community. This will serve as an opportunity to increase the student's ability and effectiveness as part of a community-based health team.

Upon successful completion of CHW 145, the student should be able to:

1. Articulate the history and services of the placement agency and develop in writing personal learning objectives in behavioral, measurable terms.
2. Examine personal attitudes, beliefs and responses concerning client population and co-workers.
3. Describe the strengths-based and social determinants of health perspectives in service provision.
4. Demonstrate the ability to work under supervision and collaborate with fellow staff members in carrying out agency services.
5. Demonstrate the ability to relate with clients from diverse backgrounds in the practicum setting.
6. Demonstrate integration of prior human services course content and practicum work experience in written and oral communication.

CHW 200 Social Work Principles and Practices for Community Health Workers (3)

3 hours lecture per week

Prerequisite(s): Satisfactory completion of the Certificate of Competence in Community Health Worker program.

Comment: Letter grade only. CHW 200 may not be audited. CHW 200 may not be taken credit/no credit.

CHW 200 provides an introduction to the profession of social work for community health workers, including its knowledge base, generalist methods, goals, and fields of practice. Students are encouraged to view the profession and themselves in realistic terms and to examine their appropriateness for continued study in social work.

Upon successful completion of CHW 200, the student should be able to:

1. Discuss, interpret, and synthesize social work concepts, theories, and data and apply them to different situations, to draw conclusions, or explain a situation.
2. Organize information and utilize reference sources, including the text, as appropriate.
3. Utilize writing skills and apply the mechanics of constructing a paper.
4. Demonstrate oral communication, observational, and assessment skills.

CHW 210 Case Management Concepts for Community Health Workers (3)

3 hours lecture per week

Prerequisite(s): Satisfactory completion of the Certificate of Competence in Community Health Worker program.

Comment: Letter grade only. CHW 210 may not be audited. CHW 210 may not be taken credit/no credit.

CHW 210 provides an overview of case management skills and practice for community health workers and to introduce them to concepts surrounding the practice of case management in a community setting. Topics include conducting intake and assessment, preparing effective care plans, making and following up on referrals, tracking and documenting outcomes, and developing appropriate discharge plans. Cultural competence, professional ethics and boundaries, and listening skills will be covered.

Upon successful completion of CHW 210, the student should be able to:

1. Explain ethical and professional considerations governing case management activities.
2. Define the various roles and responsibilities of case managers in community-based agencies.
3. Recognize and address personal attitudes and behaviors that may hinder ability to perform effectively as a case manager.
4. Describe the influence of values, attitude, and behavior in application of case management concepts and practices.
5. Demonstrate effective listening skills.
6. Develop appropriate relationships with clients.
7. Perform accurate case management assessments.
8. Develop effective, client-centered care plans.
9. Make and monitor referrals and service appropriately.
10. Document and record client activities accurately.
11. Participate effectively in team situations.

CHW 211 Case Management Practicum for Community Health Workers (1)

A total of 45 hours clinical experience in case management

Prerequisite(s): Satisfactory completion of the Certificate of Competence in Community Health Worker program.

Comment: Letter grade only. CHW 211 may not be audited. CHW 211 may not be taken credit/no credit.

CHW 211 provides practical experience in case management skills in a community-based agency where students will be able to observe and apply knowledge and skills acquired in accompanying coursework. Students will have opportunities to interact with community workers, current and potential clients, agency administration, and the larger community.

Upon successful completion of CHW 211, the student should be able to:

1. Demonstrate understanding of the daily responsibilities of case managers in community-based agencies.
2. Demonstrate basic knowledge, skills, and sensitivity while working with clients.
3. Describe human service roles and relationships to community health work.
4. Identify common community health issues.
5. Refer clients to appropriate resources.
6. Provide basic selected community health services.
7. Provide information about the site/organization to community residents.
8. Access basic community resources to meet client needs.
9. Work as part of a community-based health care team.
10. Apply interviewing and counseling skills with clients in the community.
11. Demonstrate understanding of the influence of culture on values, attitude, and behavior and impact on the community

- health worker.
- 12. Demonstrate effective listening skills.
- 13. Define and use ethical and legal standards in relationships with clients.
- 14. Demonstrate understanding of the practicum site's mission and purpose.
- 15. Adhere to policies and procedures of the practicum site.

CHW 220 Substance Abuse Awareness for the Community Health Worker (3)

3 hours lecture per week

Prerequisite(s): Satisfactory completion of the Certificate of Competence in Community Health Worker program.

Corequisite(s): CHW 221.

Comment: Letter grade only. CHW 220 may not be audited. CHW 220 may not be taken credit/no credit.

CHW 220 is intended for the student who has completed a basic curriculum in community health work. It is designed to expose the student to a practical knowledge of substance abuse issues that impact on the community health worker's particular role in providing assistance to the individual, the family, and the community.

Upon successful completion of CHW 220, the student should be able to:

1. Describe the effects of substance abuse on individuals, families and society.
2. Identify the symptoms and signs of substance abuse, particularly those that suggest early stages.
3. Evaluate the needs of the patient with substance abuse problems.
4. Discuss the needs of the patient's family and community in combating drug abuse/addiction.
5. Apply models of intervention and carry out referrals for patients with substance abuse problems.
6. Observe and apply principles of cultural competence, professional ethics and boundaries.
7. Demonstrate effective listening skills in identifying/evaluating drug abuse/addiction problems.

CHW 221 Substance Abuse Practicum for the Community Health Worker (1)

45 hours observation/practicum

Prerequisite(s): Satisfactory completion of the Certificate of Competence in Community Health Worker program.

Corequisite(s): CHW 220.

Comment: CHW 221 may not be audited. CHW 221 May only be taken credit/no credit.

CHW 221 is intended for the student who has completed a basic curriculum in community health work. It is designed to provide the student with practical experience in dealing with substance abuse issues that impact on the community health worker's role in providing assistance to the individual, the family, and the community.

Upon successful completion of CHW 221, the student should be able to:

1. Describe examples of the effects of substance abuse on individuals and families in the community and the effects on society.
2. Demonstrate competence in identifying the symptoms and signs of substance abuse, particularly those that suggest early stages.
3. Demonstrate competence in evaluating the needs of the patient with substance abuse problems.
4. Discuss the needs of the patient's family and community in combating drug abuse/addiction.
5. Apply models of intervention and carry out referrals for patients with substance abuse problems.
6. Demonstrate cultural competence as well as professional ethics and boundaries.
7. Demonstrate effective listening skills in identifying/evaluating drug abuse/addiction problems.

CULINARY ARTS

CULN 111 Introduction to the Culinary Industry/Career Preparation (2)

4 hours lecture per week for 8 weeks or

2 hours lecture per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 120 or consent of instructor.

Comment: CULN 111 may be offered as a full semester course or as 8-week modules.

CULN 111 provides an overview of the culinary industry within the aspects of the entire hospitality industry. It provides students with an introduction to the historical, social and cultural forces that have affected and shaped the industry of today. Students will identify job qualifications, professional standards, communication skills and attitudes essential for successful workers in the hospitality

industry. Students will create a web-based electronic portfolio that will be utilized throughout their educational experience to demonstrate and showcase their learning outcomes.

Upon successful completion of CULN 111, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Contrast the various organizational structures and basic functions within hospitality and culinary establishments.
2. Contrast the career opportunities and professional organizations within the field.
3. Assess the relevance of various trade publications and electronic methods for continuing education.
4. Demonstrate the importance of a variety of sustainability practices and be able to implement them in food service operations as a means for controlling operating costs and for being good environmental stewards
5. Value ethical practices in both personal and professional situations.
6. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 112 Sanitation and Safety (2)

4 hours lecture per week for 8 weeks or

2 hours lecture per week for 16 weeks

Comment: CULN 112 may be offered as a full semester course or as 8-week modules.

CULN 112 is the study and application of the principles and procedures of sanitation and safety in the hospitality industry. Includes the study of food borne illnesses, biological, chemical, and physical hazards, and cross-contamination as they may occur during the flow of food. An introduction to HACCP (Hazard Analysis Critical Control Point) and other sanitation and safety programs will also be presented. Safety issues and OSHA (Occupational Safety and Health Administration) guidelines and standards will be covered as they apply to the hospitality industry.

Upon successful completion of CULN 112, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Develop an understanding of the basic principles of sanitation and safety and to be able to apply them in the foodservice operations.
2. Reinforce personal hygiene habits and food handling practices that protects the health of the consumer.
3. Value ethical practices in both personal and professional situations.
4. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
5. Demonstrate the importance of a variety of sustainability practices and be able to implement them in food service operations as a means for controlling operating costs and for being good environmental stewards

CULN 115 Menu Merchandising (2)

4 hours lecture per week for 8 weeks or

2 hours lecture per week for 16 weeks

Prerequisite(s): CULN 111 or consent of instructor.

Comment: CULN 115 may be offered as a full semester course or as 8-week modules.

CULN 115 is a study of the factors involved in planning effective menus for a variety of food service operations. It includes the design, format, selection, costing, pricing, and balance of menu items based upon the needs of the target market.

Upon successful completion of CULN 115, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Apply the principles of menu planning and layout to the development of menus for a variety of types of facilities and service.
2. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
3. Demonstrate sustainability practices as a means for controlling operating costs and for being good environmental stewards.

CULN 120 Fundamentals of Cookery (4)

3 hours lecture, 18 hours lab per week for 8 weeks or

1.5 hours lecture, 9 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 112 or consent of instructor.

Comment: CULN 120 may be offered as a full semester course or as 8-week modules. Student must contact the Culinary department counselor to check on orientation requirements.

CULN 120 covers the fundamental concepts, skills and techniques of cookery. It includes the study of culinary terms and ingredients; cooking theories and procedures for making stocks, soups and sauces; basic cooking methods; handling and preparation techniques for fruits, vegetables, and starches; proper use of recipes, tools, and equipment with special emphasis on knife handling skills.

Upon successful completion of CULN 120, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Demonstrate skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
5. Apply the basic principles of sanitation and safety in a food service operation.
6. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 130 Intermediate Cookery (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 120 or consent of instructor.

Comment: CULN 130 may be offered as a full semester course or as 8-week modules.

CULN 130 focuses on the application of basic concepts, skills, and techniques in fundamentals of cookery to short order cookery, including breakfast cookery, as found in coffee shops, snack bars, and other quick service outlets, with emphasis in American Regional Cuisine; to quantity food production with emphasis on menu development, recipe standardization and conversion, and quality control. Includes experience in both quantity food production and short-order cookery.

Upon successful completion of CULN 130, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Develop skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
5. Demonstrate sustainability practices as a means for controlling operating costs and for being good environmental stewards.
6. Practice personal hygiene habits and food handling practices that protect the health of the consumer.
7. Apply the basic principles of sanitation and safety in a food service operation.

CULN 150 Fundamentals of Baking (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 120 or consent of instructor.

Comment: CULN 150 may be offered as a full semester course or as 8-week modules.

CULN 150 is an introduction to the fundamental concepts, skills, and techniques of basic baking. Special emphasis is placed on the study of ingredient functions, product identification, weights, measures, and proper use and maintenance of bakeshop tools and equipment. Students are assigned to stations each day and are required to apply the basic baking concepts and techniques in preparing items such as quick breads, yeast breads, rolled-in dough, pâté à choux, pies, cakes, cookies, puddings and pastry creams.

Upon successful completion of CULN 150, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Apply the fundamentals of baking science to the preparation of a variety of products.
2. Demonstrate the use and care for equipment normally found in the bakeshop or baking area.
3. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
4. Operate kitchen equipment safely and correctly.
5. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
6. Apply the basic principles of sanitation and safety in a food service operation.
7. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 155 Intermediate Baking (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 150 or consent of instructor.

Comment: CULN 155 may be offered as a full semester course or as 8-week modules.

CULN 155 includes the study of international culinary terms, ingredient identification, and safety and sanitation practices. The science of lean and rich yeast dough products, flat breads and breakfast goods will be examined. Students will bake a wide variety of

artisan breads made using prefermentâs with commercial yeast and wild yeast starters, from sourdough and multi-grain breads, French batards, Italian fougasse and focaccia as well as herb flavored breads to analyze the fine points of taste, texture, and appearance that distinguish fine breads from good breads. Students will expand their knowledge and their application to laminated dough products such as classical French puff pastry dough, croissants and Danish pastries. The molding of "non" yeast dough will be covered to create simple bread display pieces. Students will study techniques and presentations creating a variety of layer cakes, tortes, tarts, tartlets, buttercream and icings. A variety of international and popular American pies and baked custards desserts with emphasis on egg cookery will be covered. Students will continue with theories and skill development producing a variety of friandises (fancy cookies) for retail sale, using different makeup techniques and evaluate finished product and presentation.

Upon successful completion of CULN 155, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Demonstrate skills in advanced decorating techniques and complex preparations of plated desserts, French pastries, confections and classical and international dessert products.
2. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
3. Apply the fundamentals of baking science to the preparation of a variety of products.
4. Demonstrate the use and care of equipment normally found in the bakeshop or baking area.
5. Operate kitchen equipment safely and correctly.
6. Apply knowledge of laws and regulations to safety and sanitation in the kitchen.
7. Apply the basic principles of sanitation and safety in a foodservice operation.
8. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 160 Dining Room Service/Stewarding Procedures (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

CULN 160 is the study and application of the variety of service styles and techniques practiced by industry with special emphasis on the importance of the relationship coordination between the front and the back of the house. It includes the study of stewarding procedures and the study of the principles and practices of profitable alcoholic beverage operations.

Upon successful completion of CULN 160, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Apply skills related to dining room service in a variety of service styles.
2. Demonstrate quality customer service.
3. Explain the differences in the various alcoholic and non-alcoholic beverages and evaluate the influence of wine upon food.
4. Explain laws and procedures related to responsible alcoholic service.
5. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
6. Operate kitchen equipment safely and correctly.
7. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
8. Practice personal hygiene habits and food handling practices that protect the health of the consumer.
9. Apply the basic principles of sanitation and safety in a food service operation.

CULN 207 Principles of Culinary Competition I (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 12 and a minimum overall GPR of 2.0; and successful completion of a practical skills exam or consent of instructor.

Comment: Letter grade only. CULN 207 may not be audited. CULN 207 may not be taken credit/no credit.

CULN 207 provides students with the knowledge, skill, techniques, managerial principles, and attitudes necessary to compete in a mock salon or state American Culinary Federation (ACF) culinary competition. Students should anticipate spending a minimum of 10 additional hours each week outside of class, both practicing their skills and fiscal responsibility required for a competition. If selected to participate in an ACF sanctioned competition, junior membership in the American Culinary Federation will be required. Students will begin to develop an ePortfolio of the entire course experience with a detailed overview of the stages leading to competition.

Upon successful completion of CULN 207, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Develop skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Value ethical practices in both personal and professional situations.
5. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 208 Principles of Culinary Competition II (4)

2 hour lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 207 and a minimum overall GPR of 2.0 and consent of instructor.

Comment: Letter grade only. CULN 208 may not be audited. CULN 208 may not be taken credit/no credit.

CULN 208 prepares students with the knowledge, skill, techniques, managerial principles and attitudes necessary to compete in a regional and/or national American Culinary Federation (ACF) culinary competition. This course is required for all those wishing to participate in an ACF culinary hot food competition. Participation by all of the candidates for the College's Culinary Team is required. Students should anticipate spending 10-15 additional hours each week outside of class both practicing their skills and fiscal responsibility required for the regional competition. If the regional competition is won, students should anticipate spending an additional 15-20 hours per week from the ending date of this course through the date of the ACF National Convention in July. If selected to participate in an ACF sanctioned competition, junior membership in the American Culinary Federation will be required. Students will participate in the planning and implementation of a mock culinary competition that will be located at an unannounced offsite location. Students will develop an ePortfolio of the entire course experience with a detailed overview of the stages leading to competition(s).

Upon successful completion of CULN 208, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Develop skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Value ethical practices in both personal and professional situations.
5. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 221 Continental Cuisine (4)

2 hour lecture, 20 hours lab per week for 8 weeks or

1 hours lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 130 or consent of instructor or Culinary Department Chairperson.

CULN 221 focuses on the expansion of competencies gained in both the Fundamentals of Cookery and Intermediate Cookery courses, emphasizing creativity and the refining and perfecting of skills and techniques acquired; specializing cooked-to-order dishes typically served in hotels and fine dining restaurants with special emphasis on the classical cuisines. The preparation and presentation of Continental and Mediterranean cuisine items for American, French, Russian and Buffet service will be covered.

Upon successful completion of CULN 221, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Develop skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Value cross-cultural perspectives that will allow them to effectively function in the global community.
5. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
6. Apply the basic principles of sanitation and safety in a food service operation.
7. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 222 Asian/Pacific Cuisine (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 130 or consent of instructor or Culinary Department Chairperson.

CULN 222 focuses on basic classical Asian/Pacific cookery techniques that have evolved into the culinary concepts and flavors utilized in Pacific Rim and Hawai'i Regional cuisine. Through the production of the contemporary menu, students learn about cooking techniques, specialty ingredients, seasonal foods, spices, and herbs. Lecture topics include Asian/Pacific history, culture, philosophy, and geographical influences on Hawai'i's menus.

Upon successful completion of CULN 222, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Demonstrate skills in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.

2. Operate equipment safely and correctly.
3. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
4. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professional.
5. Practice personal hygiene habits and food handling practices that protect the health of the consumer.
6. Value cross-cultural perspectives that will allow them to effectively function in the global community.
7. Apply the basic principles of sanitation and safety in a foodservice operation.

CULN 231 Food Innovation (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): Credit or concurrent enrollment in FSHE 185 and a grade of "C" or higher in CULN 112; and a grade of "C" or higher in CULN 120 or consent of instructor.

Recommended Preparation: A high school level English course and a high school level mathematics course and a high school level science course.

Comments: CULN 231 may be offered as a full semester course or as an 8-week module. Students should purchase a knife kit, chef coat, chef pants, and slip-proof shoes. The same equipment and uniform for Culinary students is required.

CULN 231 will focus on the combination of technical and creative skills to take a product from ideation to commercialization. The Food Innovation course will focus on developing food concepts and executing ideas into testing of a final product. Students will learn about current food trends, the food product development process, food safety, food laws and regulations, sensory evaluation, and packaging.

Upon successful completion of CULN 231, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Identify, discuss and interpret market trends and data.
2. Demonstrate the steps necessary to develop new products from ideation to product rollout.
3. Describe current and projected food trends.
4. Demonstrate the steps required for recipe development and conversion to formula ratios.
5. Demonstrate the ability to develop food prototypes.
6. Explain the limitations of large scale production goals.
7. Explain labeling bulk food for retail sale.
8. Explain labeling for food service products.
9. Organic Regulation (Labeling Act).
10. Discuss the Federal Food, Drug, and Cosmetic Act.
11. Distinguish the role of Federal Trade Commission.
12. Differentiate dietary supplement and nutrients.
13. Categorize color derived from spices.
14. Explain Import and Export Laws.
15. Describe Intellectual Property (Patents, copyrights, trademarks, Confidentiality).
16. Describe Environmental Laws, Contracts, Insurance.
17. Describe Environmental Compliances.
18. Discuss Kosher and Halal requirements and distribution and other evolving multicultural issues.
19. Discuss multicultural dietary restrictions.
20. Describe factory inspections.
21. Describe the chemistry of changes occurring during processing, storage and utilization.
22. Demonstrate sufficient knowledge of food chemistry to control reactions in foods.
23. Classify the major chemical reactions that limit shelf life of foods.
24. Demonstrate the laboratory techniques common to basic and applied food chemistry.
25. Describe the principles behind analytical techniques associated with food.
26. Demonstrate knowledge of product scale-up in manufacturing to meet production specifications.
27. Discuss the effects of food processing equipment, conditions, and techniques on the final product quality and safety.
28. Document the development of a new food product from ideation to scale-up testing.
29. Demonstrate knowledge of mainstream packaging material properties and applications, and their impact on the environment.

CULN 240 Garde Manger (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 130 or consent of instructor or Culinary Department Chairperson.

CULN 240 students will study the basic garde manger principles with emphasis on the development of skills in the preparation of hors d'oeuvre, appetizers, canapés, and basic garnishes. Items such as aspics, forcemeats, cheeses and decorative centerpieces along with the various methods of food preservation will also be studied.

Upon successful completion of CULN 240, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Apply skills in producing a variety of cold food products.
2. Prepare items appropriate for buffet presentation, including decorative pieces.
3. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
4. Demonstrate skill in knife, tool and equipment handling and apply principles of food preparation to produce a variety of food products.
5. Operate kitchen equipment safely and correctly.
6. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
7. Apply the basic principles of sanitation and safety in a food service operation.
8. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 252 Patisserie (4)

2 hour lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "B" or higher in CULN 155 or consent of instructor or Culinary Department Chairperson.

CULN 252 includes the study of classical patisserie terms, safety and sanitation practices. Emphasis will be placed on hot, cold, and frozen desserts. Contemporary plated desserts, ice cream, sorbet, sherbets, yogurt-based ice cream, compotes and coulis will be introduced. Students will study the broad spectrum of classical and contemporary techniques and presentations in creating popular international desserts from France, Switzerland, Italy, Austria, and Germany. Topics will include the use of Bavarian cream, ganache, buttercream, mousse filling, chocolate, puff pastry (pâté feuilletée), sugar dough (pâté sucrée) éclair paste (pâté à choux), ribbon cake (biscuit joconde), dacquoise, and other meringue products. The fundamentals of tempering chocolate will be introduced to create chocolate décor and filigree work. Ribbon cake and stencil work to complement dessert presentation will be utilized. Students will be introduced to hot and cold soufflés, French pastries, petits fours, and advanced cake decorating principles.

Upon successful completion of CULN 252, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Demonstrate skills in advanced decorating techniques and complex preparations of plated desserts, French pastries, confections and classical and international dessert products.
2. Value ethical practices in both personal and professional situations.
3. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
4. Apply the fundamentals of baking science to the preparation of a variety of products.
5. Demonstrate the use and care of equipment normally found in the bakeshop or baking area.
6. Operate kitchen equipment safely and correctly.
7. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
8. Apply the basic principles of sanitation and safety in a food service operation.
9. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 253 Confiserie (4)

2 hours lecture, 20 hours lab per week for 8 weeks or

1 hour lecture, 10 hours lab per week for 16 weeks

Prerequisite(s): A grade of "C" or higher in CULN 155 or consent of instructor or Culinary Department Chairperson.

CULN 253 is the study of a variety of traditional and innovative centerpieces. Students will create seasonal centerpieces, using various mediums such as chocolate, royal icing, pastillage, marzipan, nougatine, and sugar products. Principles of preparation and application are presented and applied in the creation of hand-molded marzipan figurines. Student will continue with theory and skill development working with chocolate couverture, using tempering, spraying, coating, molding, and hand dipping applications with special emphasis on French truffles, candies and after-dinner confections. Finished products will be examined, using flavor, texture, color, consistency, creativity, originality and suitability for display exhibit as an evaluation tool.

Upon successful completion of CULN 253, the student should be able to:

1. Demonstrate skills in advanced decorating techniques and complex preparations of plated desserts, French pastries, confections and classical and international dessert products.
2. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professional.
3. Apply the fundamentals of baking science to the preparation of a variety of products.
4. Demonstrate the use and care of equipment normally found in the bakeshop or baking area.
5. Operate kitchen equipment safely and correctly.
6. Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
7. Apply the basic principles of sanitation and safety in a food service operation.
8. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

CULN 271 Hospitality Purchasing and Cost Control (6)

10 hours lecture, 6 hours lab per week for 8 weeks

5 hours lecture, 3 hours lab per week 16 weeks

Prerequisite(s): CULN 120 or consent of instructor or Culinary Department Chairperson.

Recommended Preparation: Basic computer competency skills.

CULN 271 is a study of cost control systems as they apply to restaurants, hotels, and other food service operations such as the College's food service complex. It includes experience in the preparation of financial and control related reports, and the analysis of such. It utilizes the practical learning experiences of the computer laboratory to anchor and reinforce knowledge.

Upon successful completion of CULN 271, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Explain laws and procedures related to responsible alcoholic service.
2. Perform mathematical functions related to foodservice operations.
3. Demonstrate the overall concept of purchasing and receiving practices in quality foodservice operations.
4. Apply knowledge of quality standards and regulations governing food products to the purchasing function.
5. Receive and store food and non-food items properly.
6. Value ethical practices in both personal and professional situations.
7. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
8. Demonstrate the importance of a variety of sustainability practices and be able to implement them in food service operations as a means for controlling operating costs and for being good environmental stewards.

CULN 310 Current Trends in the Culinary Industry (3)

3 hours lecture per week for 16 weeks

6 hours lecture per week for 8 weeks

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 310 may not be audited. CULN 310 may not be taken credit/no credit.

CULN 310 focuses on current trends in the culinary industry that impact Hawai'i's cultural, social, environmental, and economic viability in the global marketplace. Students examine hospitality and culinary managerial issues that affect business strategies on a macro and/or micro level. Course content includes eco-sustainability, market stability, labor development workforce, cultural values, and national and international culinary trends that affect Hawai'i's food service and tourism industries.

Upon successful completion of CULN 310, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Evaluate ethical, social, environmental, legal and economic issues that impact the quality of the industry's human resources.
2. Analyze local, national and international safety and sanitation issues such as irradiation, genetic engineering, bio waste and safe practices in farming and processing activities.
3. Formulate a list of challenges faced by suppliers that support Hawai'i's food business and visit farms, seafood suppliers, and other food service businesses and organizations that have an overall effect on the food service business in Hawai'i and internationally.
4. Propose a plan that demonstrates a proactive approach to environmental issues such as waste recycling, energy conservation, or other industry practices.
5. Evaluate new business opportunities in culinology, personal and private chef services, research & development, and health care.
6. Assess the challenges in providing services to a global culinary market.
7. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 321 Contemporary Cuisines (3)

1 hour lecture, 6 hours lab per week

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 321 may not be audited. CULN 321 may not be taken credit/no credit.

CULN 321 evaluates the contemporary menus and techniques used by chefs throughout Hawai'i and abroad. Students prepare and cook menu items that utilize techniques and food products found in contemporary cutting-edge restaurants, hotels and clubs. Students will assess cooking technologies that incorporate molecular gastronomy, energy efficiency, environmental awareness and cost effectiveness.

Upon successful completion of CULN 321, the following student learning outcomes will have been introduced, practiced or

demonstrated:

1. Define the roles of team dynamics, effective communication and leadership in producing a menu.
2. Select and use the proper cooking technologies, equipment, supplies, and production setup required to produce a menu.
3. Predict the impact of the target market's demographics and psychographics upon the appropriate product quality and taste, plate presentations, and service that will contribute to the menu's success.
4. Evaluate the influence of geography, culture, religion and history on the presentation style and development of the cuisine.
5. Integrate theoretical and practical knowledge of new and learned techniques to evaluate unique and creative dishes appropriate for the course.
6. Apply advanced culinary techniques to the preparation and presentation of dishes.
7. Design, produce and evaluate a menu appropriate for the course.
8. Prepare a meal service that is evaluated on taste profiles, dish presentation and service.
9. Compare and contrast differences in Eastern and Western spices, seasonings, flavoring combinations, and food ingredients representative of a culinary region.

CULN 322 Advanced Asian Cuisines (3)

2 hours lecture, 12 hours lab per week for 8 weeks or

1 hour lecture, 6 hours lab per week for 16 weeks

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 322 may not be audited. CULN 322 may not be taken credit/no credit. Student must purchase Asian specialty knives and tools at an approximate cost of \$200.

CULN 322 assesses the advanced cooking techniques, presentation and service of traditional and modern Asian Cuisine incorporating the various regions of China, Southeast Asia and countries that make up the Asian Pacific culinary arena. The influence of this cuisine on the traditional and contemporary cuisine of Hawai'i will be evaluated and critiqued. Students will prepare and cook menu items that utilize specialized Asian cooking methods, tools, small wares and food preparation equipment while working with indigenous food resources, products and seasonal ingredients exclusive of the country or region. Topics address the impact of culture, geography, religion and history on the culinary traditions of Asia.

Upon successful completion of CULN 322, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Define the roles of team dynamics, effective communication, and leadership in producing an advanced Asian menu.
2. Select and use the proper cooking technologies, equipment, supplies, and production set-up required to produce an advanced Asian menu.
3. Evaluate the influence of an Asian country's geography, culture, religion and history on the presentation style and development of the cuisine.
4. Apply advanced culinary techniques to the preparation and presentation of dishes exclusive of Hawai'i or an Asian culinary region.
5. Compare and contrast differences in spices, seasonings, flavoring combinations, and food ingredients representative of a culinary region.
6. Design, produce and evaluate an advanced Asian menu.
7. Prepare a meal service that is evaluated on taste profiles, dish presentation and service.

CULN 330 (Alpha) Special Culinary Topics (3)

1 hour lecture, 6 hours lab per week

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 330 may not be audited. CULN 330 may not be taken credit/no credit. CULN 330 is repeatable for a maximum of 3 credits with consent of instructor. Student must purchase specialty knives and tools at an approximate cost of \$200.

CULN 330 appraises advanced level culinary cuisine topics that build upon culinary and managerial skills learned in the AS degree level of culinary and/or pastry arts, and may vary semester to semester. Each course will support theoretical and practical experience in a specific topic as it relates to culinary and/or hospitality learning. Students may also synthesize into their learning knowledge obtained by working with visiting chefs and mentors. Specific objectives will be formulated for each special topics class.

Upon successful completion of CULN 330, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Assess culinary topics as they relate to learning objectives.
2. Define the roles of team dynamics, effective communication, and leadership in producing the special topic menu.
3. Select the cooking technologies, equipment, supplies, and production set-up required to produce the special topic menu.
4. Evaluate the influence of geography, culture, religion and history on the presentation style and development of the special topic menu.
5. Apply advanced culinary techniques to the preparation and presentation of dishes reflective of the special topic menu.
6. Prepare a meal service that is evaluated on taste profiles, dish presentation and service.

CULN 360 Beverage Service Management (3)

3 hours lecture per week

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 360 may not be audited. CULN 360 may not be taken credit/no credit.

CULN 360 evaluates quality service and management of both alcoholic and non-alcoholic beverages to include: product information, food pairings, purchasing, controlling, storing, pricing, marketing, selling and serving of a restaurant's beverage menu. Beverage laws and regulations will also be covered in this class. Class projects include the design of a beverage menu and layout of a beverage program for a typical business. This course prepares students to take a National Certification Exam in Alcohol Awareness.

Upon successful completion of CULN 360, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Justify the selection of beer, wine and spirits made in relationship to their impact upon the taste and flavors of foods.
2. Assess a wine based upon information provide on its label.
3. Examine the service procedures of wines, beers, sakes, spirits, coffee, and tea to guests.
4. Analyze the history, social and cultural impact of alcoholic beverages and the process of how wines, beers and spirits are produced, manufactured, sold and marketed.
5. Formulate a wine, beer and spirits menu that complements the food menu, marketing trends, cost/mark-up, and type of operation.
6. Construct a program to purchase, receive, issue, store, inventory and cost out beverages utilizing industry standard specifications and cost analysis.
7. Evaluate the impact that dram shop laws and federal and state rules and regulations governing alcohol distribution, and sales have on today's beverage industry.
8. Demonstrate responsible alcohol service training provided by a National Certification program.

CULN 380 Nutritional Cuisines (3)

2 hours lecture, 12 hours lab per week for 8 weeks or

1 hour lecture, 6 hours lab per week for 16 weeks

Prerequisite(s): Satisfactory completion of the AS degree in Culinary Arts with a concentration in Culinary Arts program or consent of instructor.

Comment: Letter grade only. CULN 380 may not be audited. CULN 380 may not be taken credit/no credit.

CULN 380 introduces the principles of nutritional science in the preparation of food in order to maintain a healthy eating style. Students formulate menus that integrate healthy standards for the general public as well as special dietary needs. These standards are recommended by agencies such as the American Dietetic Association and the American Heart Association. Students will synthesize the principles of nutrition and basic cooking techniques to prepare recipes and menus that promote healthy eating. They will select and balance food nutrients, quality seasonal products, and appropriate portion size, while maximizing texture, color, and flavor.

Upon successful completion of CULN 380, the following student learning outcomes will have been introduced, practiced or demonstrated:

1. Distinguish between healthy and unhealthy diets and assess their psychological and physiological results on the body.
2. Analyze global trend and fad menus and the effect on maintaining societal health.
3. Develop a cyclical menu that incorporates a healthy eating style based on the American Dietetic Association (ADA), the American Heart Association and other governmental agency guidelines.
4. Experiment with cooking techniques that maximize the nutritional value of proteins, legumes, vegetables, and starches in a dish.
5. Compare differences between cardiac, hypertension, and diabetic diseases, and assess the long-term impact on the body with and without diet adjustments.
6. Analyze a menu utilizing industry software programs for record keeping.
7. Identify laws and regulations required by various state and federal agencies in the production of client meals.

8. Practice standards of in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.
9. Practice personal hygiene habits and food handling practices that protect the health of the consumer.

DANCE

DNCE 121 Beginning Ballet I (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab per week

Recommended Preparation: Qualification for ENG 100 or qualification for ESL 100.

Comment: DNCE 121 may be repeated for a maximum of 6 credits. Students will be required to purchase appropriate footwear for DNCE 121.

DNCE 121 will introduce students to basic vocabulary and movement techniques that identify ballet as a unique performance art. Each class period, students will engage in physical practice to gain mastery in the fundamentals of ballet technique.

Upon successful completion of DNCE 121, the student should be able to:

1. Identify, using appropriate vocabulary, perform and explain the basic purposes of a range of basic barre exercises.
2. Identify, using appropriate vocabulary, and perform a range of basic center exercises.
3. Perform simple choreographed combinations in the areas of adagio, petite allegro, grand allegro, and pirouette preparation.
4. Explain the importance of the fundamental techniques of plié, and tendu.
5. Distinguish performance dynamics through execution of adagio, petite allegro and allegro combinations.
6. Display increased levels in personal strength, flexibility, coordination and movement memory.
7. Discuss Ballet in its relationship to its historical context and to other art forms.

DNCE 122 Beginning Ballet II (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab per week

Prerequisite(s): DNCE 121 or consent of instructor.

Comment: DNCE 122 is repeatable for a maximum of six credits. Students will be required to purchase appropriate footwear for DNCE 122.

DNCE 122 provides a continuing course in the art and performance of Ballet at a beginning level. Students will develop their understanding of ballet vocabulary and mastery of ballet techniques through continued physical practice in combinations of increasing complexity.

Upon successful completion of DNCE 122, the student should be able to:

1. Identify, using appropriate vocabulary, perform and explain how a range of basic barre exercises develop into increasingly complex sequences of movement.
2. Identify, using appropriate vocabulary, and perform a range of center exercises beyond the basic elements of ballet.
3. Perform simple choreographed combinations in the areas of adagio, petite allegro, grand allegro, and pirouette en dehors and en dedans.
4. Explain the importance of the fundamental techniques of plié, and tendu.
5. Identify stage directions, various directions in space, and directions of movement, using appropriate vocabulary.
6. Begin to explore potential for personal expression through performance dynamics in the execution of adagio, petite allegro and allegro combinations.
7. Display increased levels in personal strength, flexibility, coordination and movement memory.
8. Explain the relationship of Ballet to other art forms.

DNCE 131 Modern Dance I (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab per week

Comment: DNCE 131 is repeatable once for a maximum of six credits.

DNCE 131 Modern Dance I is an introduction to basic modern dance technique as a communicative art form. This course emphasizes skills in various styles of movement fundamentals, rhythm, kinesthetic awareness, and creative process.

Upon successful completion of DNCE 131, the student should be able to:

1. Demonstrate comprehension and articulate movement vocabulary.

2. Demonstrate by combining specific dance/ movement patterns a development of muscle memory and kinesthetic awareness.
3. Demonstrate the creative process by expressing movement through structured improvisation problems.
4. Show comprehension of alignment, centering, and balance.
5. Show an acute sense of rhythm, pulse, and phrasing.
6. Demonstrate an increased range and variety of body motion, flexibility, strength, control, and coordination.

DNCE 132 Modern Dance II (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab

Prerequisite(s): DNCE 131 or consent of instructor.

Comment: DNCE 132 is repeatable once for a maximum of six credits.

DNCE 132 Modern Dance II is the second course in a two-semester sequence of introductory level modern dance technique. The emphasis of this course is to continue developing skills in fundamental movements and concepts and to further develop comprehension of dance as a communicative art form through the creative process.

Upon successful completion of DNCE 132, the student should be able to:

1. Demonstrate greater technical proficiency and range of varied body motion, flexibility, strength, and coordination.
2. Demonstrate greater comprehension and articulation of movement vocabulary and concepts.
3. Demonstrate proficiency of muscle memory and kinesthetic awareness by/through combining specific dance/movement patterns.
4. Show further comprehension of alignment, centering and balance.
5. Demonstrate greater comprehension of the creative process by exploring movement through structured improvisation.
6. Show an acute sense of rhythm, pulse, and phrasing.

DNCE 150 Introduction to Dance (3) KCC AA/DA and KCC AS/AH

3 hours lecture per week

DNCE 150, Introduction to Dance, is predominantly a lecture class introducing students to dance as an art form and as an activity uniquely human. Dance techniques, movement analysis, choreographic styles, dance history and philosophy are examined by participatory activities, lectures, demonstrations, videos and performances. Varieties of dance are considered with an emphasis on Western theatrical styles.

Upon successful completion of DNCE 150, the student should be able to:

1. Identify and analyze dance using the basic knowledge of the elements of movement, Laban analysis, and dance technique of a variety of dance styles.
2. Demonstrate verbal, written, and group communication skills relevant to dance.
3. Explain the history, philosophy, and cultural aspects of various types of dance.

DNCE 212 Traditional Hula (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab per week

Comment: DNCE 212 may be taken for a letter grade and credit/no credit. DNCE 212 may not be audited.

DNCE 212 is a beginning course in traditional hula. DNCE 212 includes performance of repertoire and technique at an elementary level.

Upon successful completion of DNCE 212, the student should be able to:

1. Define terminology and cultural aspects concerning this art form.
2. Demonstrate chanting, basic dance steps and hand/implement movements associated with traditional hula.
3. Explain the meanings and the reasoning of the texts studied.
4. Discriminate between various types of hula in the traditional/ancient style.
5. Perform the course material with some mastery.
6. Develop a conceptual and kinesthetic understanding of movement techniques associated with traditional hula.
7. Develop strength, flexibility, endurance, and overall coordination.
8. Develop technical proficiency in elementary hula techniques associated with traditional hula.
9. Examine the religious, aesthetic and metaphorical symbols that are manifested in traditional hula.

DNCE 213 Modern Hula (3) KCC AA/DA

1.5 hours lecture, 3 hours lecture/lab per week

Comment: Letter grade and credit/no credit only. DNCE 213 may not be audited.

DNCE 213 is a beginning course in modern hula, with emphasis on dances that can be developed creatively and used in social situations.

Upon successful completion of DNCE 213, the student should be able to:

1. Develop conceptual and kinesthetic movement techniques associated with modern hula.
2. Develop strength, flexibility, endurance, and overall coordination.
3. Trace the development and evolution of the modern hula form from its traditional roots.
4. Demonstrate basic dance steps and hand-implement movements associated with modern hula.
5. Recognize and discriminate musical forms conducive to modern hula accompaniment.
6. Develop technical proficiency in elementary hula techniques associated with modern hula.
7. Examine the social, economic, colonial, and cultural forces that have in the past and will in the future continue to shape this unique art form.

DEAF STUDIES

DEAF 201 Introduction to Deaf Studies and Deaf Education (3)

3 hours lecture per week

Prerequisite(s): A grade of "B" or higher in ASL 101 and a grade of "B" or higher in ASL 102 and ENG 100.

Comment: Letter grade only. DEAF 201 may not be audited. DEAF 201 may not be taken credit/no credit.

DEAF 201 examines the diverse life experiences of deaf individuals including the structure and dynamics within their family unit, the theories and models that guide practices within educational institutions for deaf children, the process of acculturation into deaf-centric social and political groups, the challenges deaf people face when interacting with mainstream society, and the process of adaptation for equity in access and opportunity. Students will use quantitative and qualitative research methods to investigate historical, linguistic, educational, socio-cultural, and legal issues relevant to the Deaf Community of the U.S., Hawai'i and the Pacific and evaluate their impact on the individual and on the community. Contributions by Deaf people to education, linguistics, technology, human rights, and community advancement will be highlighted.

Upon successful completion of DEAF 201, the student should be able to:

1. Trace the history of deaf people from an institutionalized system of oppression to empowerment, through their education, their language, their work, their culture, their contributions and their interaction with mainstream society (including historical information from Hawai'i and the Pacific).
2. Distinguish between the medical/pathological and socio-cultural models of deaf people and discuss the foundations for those views, from perspectives within Deaf Culture and perspectives within U.S. mainstream society.
3. Describe the diverse life experiences of deaf people (family, education, language & literacy, social, vocational), including interactions within the Deaf Community and in mainstream society.
4. Identify features of Deaf Culture and diversity within Deaf Culture groups, including behavior and interactions within and between Deaf Culture groups.
5. Examine the institution of education as it applies to deaf students—compare and contrast the theories, models, and practices for educating deaf students, review the legal basis for placement and services, and redefine Least Restrictive Environment (communication methods, instructional philosophies, and educational placements).
6. Catalog and evaluate major national, regional, local, and virtual deaf-related resources (social, cultural, educational) and the contributions by Deaf people to education and the community.
7. Determine the impact of technology on the lives of deaf people, individually and as a group, including assistive technology, alerting technology, communication technology, hearing technology, and social networking.
8. Assess roles and responsibilities of educational personnel in K-12 settings and investigate career opportunities working in the Deaf World, for both deaf and hearing individuals.

DEAF 202 Effective Teaching Strategies (3)

3 hours lecture per week

Prerequisite(s): A grade of "B" or higher in ASL 201 and a grade of "B" or higher in DEAF 201 and ENG 100.

Corequisite(s): ASL 202.

Recommended Preparation: Experience working with deaf children, especially in an educational setting.

Comment: Letter grade only. DEAF 202 may not be audited. DEAF 202 may not be taken credit/no credit.

DEAF 202 will provide an overview of issues related to developing English and ASL literacy and other academic skills in children who are deaf or hard-of-hearing. Differing schools of thought and approaches will be examined. The course will introduce literacy and content methods and materials used in K-12 classrooms. Models of teaching, learning styles, curriculum areas, and scope of subjects, classroom procedures, student learning outcomes, and statewide standards will be discussed.

Upon successful completion of DEAF 202, the student should be able to:

1. Compare and contrast various literacy development approaches in working with deaf and hard of hearing children.
2. Demonstrate literacy development strategies including the use of ASL and printed English in the classroom.
3. Identify appropriate teaching materials for literacy development and other academic content areas.
4. Apply instructional strategies and materials to meet the statewide literacy and content standards.
5. Adapt instructional strategies to meet a variety of academic and literacy levels.

DEAF 294 Deaf Education Capstone Seminar and Practicum (3)

Seminar Face-to-Face Contact Hours: 12 hours (1.5 hours every other week for 8 weeks)

Seminar On-line Contact Hours: 12 hours (1.5 hours every other week for 8 weeks)

Practicum Hours: 150 (10 hours per week for 15 weeks)

Prerequisite(s): A grade of "B" or higher in DEAF 201 and a grade of "B" or higher in DEAF 202 and 285 and demonstrated ASL fluency (e.g., as evaluated by the ASLPI) at the intermediate level (2.0 on ASLPI) and consent of instructor.

Comment: DEAF 294 may not be audited. DEAF 294 may not be taken credit/no credit. Students must obtain fingerprint, background check and TB test clearance, as required by their practicum site.

DEAF 294 provides a culminating opportunity for pre-education majors and educational paraprofessionals in Deaf Education to effectively apply and integrate what they have gained in previous program courses and field assignments to preK-12 settings. In their practicum settings, students will be expected to use appropriate teaching methods and learning principles, conduct classroom instruction and activities, and manage behaviors in small and/or large groups, under the direction and supervision of a mentor teacher. Students will also be expected to communicate effectively in American Sign Language and English. In seminar sessions, students will be expected to problem-solve relevant issues, share pivotal learning incidents, and appraise their personal and professional growth. Students will also create a comprehensive portfolio, showcasing evaluations of their practicum performances, professional disposition and conduct, ethical behaviors, and knowledge of the field.

Upon successful completion of DEAF 294, the student should be able to:

1. Effectively apply and integrate what they have learned from previous program courses and field assignments.
2. Use appropriate teaching methods and learning principles.
3. Conduct classroom instruction and activities and manage behaviors in small and/or large groups.
4. Apply critical thinking, reflection, and problem-solving skills to relevant issues.
5. Effectively communicate in American Sign Language and English.
6. Reflect on and appraise experiences in terms of personal and professional growth.
7. Demonstrate professional disposition and conduct, as well as ethical behaviors in all interactions and situations.
8. Complete a Professional Portfolio

DENTAL ASSISTING

DENT 100 Essentials of Dental Assisting (3)

4 hours lecture per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100L and DENT 103 and DENT 103L and DENT 105 and DENT 106 and DENT 106L and DENT 108.

Comment: Letter grade only. Cannot be audited or taken credit/no credit.

DENT 100 is designed to give students the foundational knowledge and skills associated with performing the job duties of an entry-level clinical dental assistant. The focus of this course is on dental terminology, different aspects of the dental professions and concepts of four-handed dentistry. Safety practices in terms of infection control are also emphasized. Patient management and professionalism will be included.

Upon successful completion of DENT 100, the student should be able to:

1. Develop an understanding of the concepts of dental assisting and its relationships to other members' functions in the dental team.
2. Develop understanding of disease processes and the importance of infection control in the dental environment.
3. Demonstrate ability to identify dental rotary instruments and equipment and their uses.
4. Demonstrate understanding of 4 handed dentistry principles.
5. Demonstrate understanding of proper procedures during medical emergencies in the dental office.
6. Identify special accommodations for medically compromised patients.
7. Identify proper record keeping as measure of risk management and as part of complete patient healthcare delivery.
8. Develop an understanding of proper procedure for infection control and workplace safety.
9. Develop understanding of different hand instruments and their uses.
10. Develop understanding of medical emergencies and responses in the dental office setting.
11. Identify patient management principles and strategies.
12. Identify personal qualities of a successful dental team member.
13. Develop an understanding of the different vital signs and how variations effect dental treatment.

DENT 100L Essentials of Dental Assisting Lab (3)

7.5 hours lecture/lab per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 103 and DENT 103L and DENT 105 and DENT 106 and DENT 106L and DENT 108.

Comment: Letter grade only. DENT 100L may not be audited and may not be taken credit/no credit.

DENT 100L provides experiences for students to apply the knowledge and skills gained in DENT 100. Emphasis is on safety and efficiency in the dental clinical setting, including four-handed dentistry, infection control and instrumentation. Patient safety is especially emphasized. Students apply principles of psychology in patient management. Students provide instruction and education to patients in oral hygiene and provide pre and post operative instruction as prescribed by a dentist.

Upon successful completion of DENT 100L, the student should be able to:

1. Demonstrate proper level of professionalism in terms of appearance and conduct.
2. Demonstrate infection control and OSHA safety measures in clinical and laboratory settings.
3. Demonstrate proper care of equipment.
4. Demonstrate principles of 4 handed dentistry.
5. Use different charting techniques to note conditions of the teeth and mucosa.
6. Identify oral manifestations of systemic conditions.
7. Demonstrate operatory set-up and patient positioning.
8. Identify medical emergencies and demonstrate clinician's responses.
9. Promote wellness by instruction of proper nutrition, oral hygiene instruction and harmful habit control support.
10. Identify techniques of patient management and apply them in different scenarios.

DENT 103 Dental Materials (1)

1.25 hours of lecture per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103L and DENT 105 and DENT 106 and DENT 106L and DENT 108.

Comment: Letter grade only. DENT 103 may not be audited and may not be taken credit/no credit.

DENT 103 identifies the various materials used in the practice of dentistry including the structure, composition, uses, manipulation and properties of these materials.

Upon successful completion of DENT 103, the student should be able to:

1. Identify dental materials and relate them to their different procedures.
2. Describe use of product safety information.
3. Identify different impression materials and their characteristics.
4. Discuss the need and uses of appliances.
5. Discuss the different types of dental models.
6. Discuss the fabrication of provisional restorations.
7. Discuss tooth whitening procedures.
8. Discuss restorative dental materials.
9. Discuss methods of taking impressions on a variety of patients.
10. Discuss prosthodontic appliances.

DENT 103L Dental Materials Lab (2)

5 hours lecture/lab per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103 and DENT 105 and DENT 106 and DENT 106L and DENT 108.

Comment: Letter grade only. DENT 103L may not be audited and may not be taken credit/no credit.

DENT 103L provides practical application of the knowledge gained in DENT 103. The manipulation of different dental materials shall be demonstrated by the instructor and replicated by the students until proficiency can be demonstrated. The importance of proper use and product and equipment safety in the laboratory setting will be stressed.

Upon successful completion of DENT 103L, the student should be able to:

1. Demonstrate tooth whitening take-home procedures.
2. Demonstrate competency in preparing dental materials for restorative procedures.
3. Demonstrate use of composite restorations.
4. Demonstrate proficiency at taking alginate impressions on a variety of patients.
5. Demonstrate preparing of dental models.
6. Demonstrate mixing of different cements and liners.
7. Demonstrate proficiency in fabricating provisional crown.
8. Develop and understanding of in-office tooth whitening procedures.
9. Demonstrate proficiency in fabricating dental models.
10. Demonstrate proper use of polyvinyl impression materials.

DENT 105 Dental Sciences (2)

2.5 hours lecture per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103 and DENT 103L and DENT 106 and DENT 106L and DENT 108.

Comment: Letter grade only. DENT 105 may not be audited and may not be taken credit/no credit.

DENT 105 introduces the student to principles of general anatomy, physiology, microbiology and nutrition. DENT 105 places emphasis on dental aspects of oral anatomy, histology, embryology, pathology and pharmacology.

Upon successful completion of DENT 105, the student should be able to:

1. Explain the purpose of each body system and how they function.
2. Locate and identify various skeletal, muscular, circulatory and neurological structures of the head and neck.
3. Identify and locate parts of the salivary system and paranasal sinus structures.
4. Name and identify structures in the oral cavity.
5. Describe the general and specific features of teeth in the permanent dentition.
6. Relate current trends in dental care derived from articles in professional publications.
7. Discuss development of human dentition and supporting structures.
8. Identify and discuss pathology of the oral cavity.
9. Identify oral manifestations of systemic conditions.
10. Link oral conditions and overall health.

DENT 106 Dental Radiography (1)

1.25 hours in lecture per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103 and DENT 103L and DENT 105 and DENT 106L and DENT 108.

Comment: DENT 106 may not be audited and may not be taken credit/no credit.

DENT 106 provides basic knowledge on the discovery of x-rays, role of x-rays in dentistry, physical properties and the hazards of radiation. Radiation safety measures will be emphasized. Radiographic techniques and processing procedures will be discussed. Common anatomical landmarks critical to proper interpretation of x-rays will be identified.

Upon successful completion of DENT 106, the student should be able to:

1. Explain the beginnings of x-rays and their role in dentistry.
2. Explain the principals of electromagnetic radiation.

3. Identify the component parts of the x-ray machine.
4. Explain the importance of radiation safety measures.
5. Contrast the different imaging techniques.
6. Explain the importance of proper film or sensor placement and accurate exposure factors.
7. Identify and explain technique and/or processing errors and measures to correct them.
8. Identify anatomical landmarks as aids to the proper mounting of dental images.
9. Understand OSHA and Hawai'i State guidelines for x-ray safety.
10. Discuss the different imaging options used in dentistry.

DENT 106L Dental Radiography Lab (1)

3.75 hours in lab per week for 12 weeks

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103 and DENT 103L and DENT 105 and DENT 106 and DENT 108.

Comment: Letter grade only. DENT 200 may not be audited and may not be taken credit/no credit.

DENT 106L emphasizes the practical application of the material presented in DENT 106. Under close supervision of the instructor, students will practice taking images initially on manikins, critique the images and retake as necessary. They will progress to take images on patients. Strict radiation safety measures will be practiced at all times.

Upon successful completion of DENT 106L, the student should be able to:

1. Demonstrate proficiency in assembling and the use of positioning devices.
2. Demonstrate proficiency in the use of the bisection-of-the-angle technique.
3. Demonstrate proficiency in the use of the paralleling technique.
4. Demonstrate proficiency on taking bitewing images on mannequins.
5. Demonstrate proficiency on taking periapical images on mannequins.
6. Expose, process and mount good diagnostic full mouth quality images on a mannequin.
7. Expose, process and mount good diagnostic full mouth quality images on classmates.
8. Expose, process and mount good diagnostic full mouth quality images on a patient.
9. Practice radiation safety measures while taking radiographs.
10. Practice infection control measures while taking radiographs.

DENT 108 Clinical Externship (2)

A total of 120 hours per semester at an assigned clinical site

Prerequisite(s): Acceptance into the Certificate of Competence in Dental Assisting program or acceptance into the Certificate of Achievement in Dental Assisting program or consent of Dental Assisting Program Director.

Corequisite(s): DENT 100 and DENT 100L and DENT 103 and DENT 103L and DENT 105 and DENT 106 and DENT 106L.

Comment: This is a 2 credit Clinical course to provide students with at least 100 hours of experience in a General Practice setting.

DENT 108 is a course that provides students with a minimum of 100 clinical hours in a general practice dental office. Students may begin with observation, but shall spend the majority of their time in direct patient care. Student will apply the knowledge and skills they acquired during the didactic phase of the program (first 12 weeks) in the clinical setting participating in deliver of all aspects of care to the dental patients of the practice.

Upon successful completion of DENT 108, the student should be able to:

1. Demonstrate competency in the application of the concept of four-handed dentistry.
2. Demonstrate knowledge and skills in the identification of instruments and in instrument transfer.
3. Demonstrate knowledge and skills in the application of infection control procedures.
4. Demonstrate knowledge and skills in assembling tray setups for various procedures.
5. Demonstrate competency in working with dental restorative materials.
6. Demonstrate competency in working with impression materials.
7. Demonstrate skills in the proper use of the x-ray machine, processing films, etc.
8. Demonstrate skills in the management of patients.
9. Maintain good communication links among personnel in the dental office.
10. Recognize ethical and legal responsibilities in the dental environment.

DENT 200 Dental Office Administration (3)

6 hours lecture/lab per week

Prerequisite(s): DENT 100 and DENT 100L.

Corequisite(s): DENT 205 and DENT 208 and DENT 210.

Comment: Letter grade only. DENT 200 may not be audited. DENT 200 may not be taken credit/no credit.

DENT 200 gives an overview of administrative functions in a dental office. Students will participate in DENTRIX training. DENTRIX is the software program that more than 70% of dental offices use in Hawai'i. Using this system, students will familiarize themselves with patient records, insurance claims filing, charting, and appointment and recall functions. Students will also learn about verbal communication, in particular phone etiquette and management. Students will also learn about dental written communication, between practice and patients, with other dental professionals and insurance companies.

Upon successful completion of DENT 200, the student should be able to:

1. Describe good phone courtesy and handling of different phone calls.
2. Describe internal and external marketing.
3. Discuss ways of sending written communication from a dental office.
4. Identify documentation forms and describe information contained in patient records.
5. Discuss the management of inventory systems
6. Identify proper record keeping as measure of risk management and as part of complete patient healthcare delivery.
7. Modify schedules, patient records, treatment plans and insurance claims using computer programs for the dental office.
8. Explain guidelines for office policies and staff management issues.
9. Discuss accounts receivable and accounts payable as they pertain to a dental office.
10. Demonstrate office management function integration using dental computer software.

DENT 203 Dental Materials II (2) Spring

1 hour lecture, 3 hours lab per week

Prerequisite(s): DENT 103 and DENT 103L.

Corequisite(s): DENT 200 and DENT 205 and DENT 206L and DENT 208 and DENT 210.

Comment: Letter grade only. DENT 203 may not be audited. DENT 203 may not be taken credit/no credit. DENT 203 is offered in the Spring semester only.

DENT 203 focuses on various dental materials used predominantly in Specialty practice, such as: periodontal dressings, surgical stents, fabrication of dental appliances, and in-depth applications of provisional coverage for large prosthodontic cases. This course builds upon the students' knowledge and skills gained in DENT 103 and 103L. Expanded exposure to a variety of restorative materials is also included.

Upon successful completion of DENT 203, the student should be able to:

1. Demonstrate different methods for impression taking.
2. Demonstrate proficiency at study model fabrication used in specialty practice.
3. Demonstrate fabrication of various dental appliances.
4. Demonstrate fabrication of multi-unit provisional coverage.
5. Discuss different types of cements and their uses in specialty practices.
6. Demonstrate use of dental materials used in surgical specialties.
7. Discuss and perform the duties of a clinical assistant in a specialty practice.

DENT 205 Dental Sciences II Focus on Pathology and Development (1)

1 hour lecture per week

Prerequisite(s): DENT 105.

Corequisite(s): DENT 200 and DENT 208 and DENT 210.

Comment: Letter grade only. DENT 205 may not be audited. DENT 205 may not be taken credit/no credit.

DENT 205 focuses on oral pathology, developmental anomalies and oral conditions as they relate to systemic conditions.

Upon successful completion of DENT 205, the student should be able to:

1. Note the elements of a complete clinical description.
2. Describe the steps involved in reaching a differential diagnosis.
3. Write possible ways of determining definitive diagnosis.
4. Define the terms used to describe the inflammatory process.
5. Describe the impact of immune deficiency on an individual and the role that opportunistic infections play in the process.
6. List measures an individual can take to lower the risk of developing cancer.

7. Describe the characteristics of developmental hereditary and congenital disorders.
8. Describe oral implications based on sample case studies that present with different systemic conditions.
9. Discuss the development of human dentition and supporting structures.
10. Identify and discuss pathology of the oral cavity.
11. List oral manifestations of systemic conditions.
12. Discuss oral diseases and how they impact overall health of individuals.

DENT 206L Dental Radiography II (2)

4 hours lab/clinical per week

Prerequisite(s): DENT 106 and DENT 106L or a minimum of one year experience taking dental x-rays.

Recommended Preparation: Prior experience taking dental x-rays.

Comment: Letter grade only. DENT 206L may not be audited. DENT 206L may not be taken credit/no credit.

Students in DENT 206L will expose dental radiographs on human patients and learn preliminary interpretation of dental radiographs on a variety of patients.

Upon successful completion of DENT 206L, the student should be able to:

1. Demonstrate proficiency in the use of XCP instruments on a variety of patients.
2. Demonstrate proficiency in the use of the bisection-of-the-angle and the paralleling techniques.
3. Expose and process quality diagnostic bitewings using both adult and child patients.
4. Identify anatomical landmarks, anomalies and radiographic artifacts.
5. Practice radiation safety measures while taking radiographs.

DENT 208 Dental General and Specialty Practice Clinical Rotation (4)

A total of 220 clinical hours and 21 seminar hours per semester

Prerequisite(s): DENT 108.

Corequisite(s): DENT 200 and DENT 203 and DENT 205 and DENT 206 and DENT 210.

Comment: Letter grade only. DENT 208 may not be audited. DENT 208 may not be taken credit/no credit.

DENT 208 students will spend approximately 80 hours in general practice clinical externship and at least 120 hours rotating through specialty areas such as Orthodontics, Endodontics, Periodontics, Pedodontics, Oral Maxillofacial Surgery and Prosthodontics. Students may also elect to work in a clinic that serves special needs patients exclusively or in a nursing home setting.

Upon successful completion of DENT 208, the student should be able to:

1. Manage infection and hazard control protocol consistent with published professional guidelines.
2. Perform a variety of instrument transfers.
3. Assist with gathering of dental records (photographs, radiographs, impressions, etc.). Identify the different dental specialties.
4. Demonstrate knowledge and skills in the identification of specialty instruments and their functions.
5. Demonstrate knowledge and skills in assembling tray setups for various procedures.
6. Discuss the different skills required for assisting in different specialty practices.
7. Identify accommodations and treatment modifications for Special Needs Patients.
8. Identify accommodations and treatment modifications for Geriatric Patients.
9. Attend periodic seminars, to be scheduled by instructor for discussion of clinical experiences.

DENT 210 Seminar for National Board Exam for Certified Dental Assistant (1)

1 hour seminar per week

Recommended Preparation: Two years of work experience as a dental assistant or acceptance into or satisfactory completion of a Dental Assisting Program. Eligibility to take the Dental Assisting National Board Certified Dental Assistant examination is allowed only after successful completion of a CODA accredited dental assisting program or at least 3350 hours of work experience.

Comment: Credit/no credit grading only. DENT 210 may not be taken for a letter grade. DENT 210 may not be audited.

DENT 210 prepares students to take the Dental Assisting National Board Certified Dental Assistant Exam.

Upon successful completion of DENT 210, the student should be able to:

1. Prepare to take the 3 part Practice Dental Assisting National Board Certified Dental Assistant Exam.