

CHEMISTRY

CHEM 100 Chemistry and Society (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: 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. Use critical thinking and math skills to perform calculations such as metric conversions, balance chemical equations and solve stoichiometric problems.
2. Define and describe Acids and Bases both quantitatively and qualitatively.
3. Determine and explain the types of bonding, shapes, and polarity of simple molecular and ionic compounds.
4. Quantitatively and qualitatively describe the properties, and changes due to energy of matter.
5. Determine and understand the basic nuclear and electronic structure of atoms and how this relates to the Periodic Table.
6. Give the names and formulas of elements, ions, and compounds using the Periodic Table.
7. Define sustainability on local, national, and international levels.

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 and KCC AS/NS

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. 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 or qualification for MATH 135 or a higher-level mathematics course.

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 and KCC AS/NS

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. 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 272 Organic Chemistry I (3) KCC AA/DP and KCC AS/NS Fall Summer

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 offered in the Fall and Summer semesters only.

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. This course is intended for science majors.

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 I Lab (2) KCC AA/DY and KCC AS/NS

4 hours lecture/lab per week

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

Comment: Letter grade and credit/no credit grading only. CHEM 272L may not be audited. 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. This course is intended for science majors.

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 and KCC AS/NS Spring semester

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 offered in the spring semester only.

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. CHEM 273 is intended for science majors.

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 II Lab (2) KCC AA/DY and KCC AS/NS Spring Semester

4 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 may not be audited. CHEM 273 is offered in the spring semester only.

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. CHEM 273L is intended for science majors.

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

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

4 hours lecture per week

Comment: Previously CHNS 101. CHN 101 is designed for students who are beginning to study the Chinese language. Students with prior Chinese language experience, including any dialect of Chinese, should take the placement test at the Lama Testing Center (<http://www2.hawaii.edu/~kcctest/>) before registering or contact the instructor.

CHN 101 is designed for learners with no background in Chinese. Study of 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. Topics of conversation include basic greetings, names, family, work, study, and hobbies.

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

1. Exchange information about familiar topics using phrases and simple sentences sometimes supported by memorized language, and ask and answer simple questions about everyday situations in short social interactions. (Interpersonal Communication)
2. Verbally convey basic information on familiar topics using phrases and simple sentences. (Presentational Speaking)
3. Write short messages and notes on familiar topics related to everyday life. (Presentational Writing)

4. Interpret spoken words, phrases, and simple sentences related to everyday life by recognizing pieces of information and by identifying the main topic. (Interpretive Listening)
5. Interpret familiar words, phrases, and sentences within short and simple texts related to everyday life and identify the main idea of written materials. (Interpretive Reading)

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

4 hours lecture per week

Prerequisite(s): CHN 101 with a grade of "C" or higher or CHNS 101 with a grade of "C" or higher or satisfactory score on language placement test or instructor consent.

Comment: Previously CHNS 102. Students with prior Chinese language experience should take the placement test at the Lama Testing Center (<http://www2.hawaii.edu/~kcctest/>) before registering or contact the instructor.

CHN 102 is a continuation of CHN 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 CHN 102, the student should be able to:

1. Participate in conversations on a number of familiar topics using simple sentences, and handle short social interactions in everyday situations by asking and answering simple questions. (Interpersonal Communication)
2. Present information on most familiar topics using a series of simple sentences. (Presentational Speaking)
3. Write briefly about most familiar topics and present information using a series of simple sentences. (Presentational Writing)
4. Understand the main idea in short, simple messages and presentations on familiar topics, and understand the main idea of simple conversations. (Interpretive Listening)
5. Understand the main idea of short and simple texts when the topic is familiar. (Interpretive Reading)

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

4 hours lecture per week

Prerequisite(s): CHN 102 with a grade of "C" or higher or CHNS 102 with a grade of "C" or higher or satisfactory score on language placement test or instructor's consent.

Comment: Previously CHNS 201.

In CHN 201 students will further enhance listening, speaking, reading and writing skills in standard Mandarin Chinese, attaining approximately the Intermediate-Mid level on the ACTFL-ETS (American Council on the Teaching of Foreign Languages) proficiency scale. Topics of conversation covered include college life, registering for classes, boyfriends and girlfriends, computers, as well as some essential points of Chinese geography, society, and culture.

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

1. Converse on familiar topics using sentences and series of sentences, handle short social interactions in everyday situations by asking and answering a variety of questions, and express oneself concerning one's everyday life. (Interpersonal Communication)
2. Convey information on a wide variety of familiar topics using connected sentences. (Presentational Speaking)
3. Write on a wide variety of familiar topics using connected sentences. (Presentational Writing)
4. Interpret the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies, and identify the main idea in conversations. (Interpretive Listening)
5. Interpret the main idea of texts related to everyday life and personal interests or studies. (Interpretive Reading)

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

4 hours lecture per week

Prerequisite(s): CHN 201 with a grade of "C" or higher or CHNS 201 with a grade of "C" or higher or satisfactory score on the language placement test or instructor's consent.

Comment: Previously CHNS 202. CHN 202 is designed for students who have some experience with the Chinese language. Students who have not yet completed CHN 201 but who have prior Chinese language experience, including any dialect of Chinese, should take the placement test at the Testing Center in Lama Library before registering.

In CHN 202 students will continue to further enhance their listening, speaking, reading and writing skills in standard Mandarin Chinese, attaining approximately the Intermediate-High level on the ACTFL-ETS (American Council on the Teaching of Foreign Languages) proficiency scale. Topics of conversation covered include life and wellness, gender equality, environmental conservation, Chinese history, and interviewing for a job.

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

1. Converse with ease and confidence on familiar topics; talk about events and experiences in various time frames; describe people, places, and things; and handle social interactions in everyday situations, sometimes even when there is an unexpected complication. (Interpersonal Communication)
2. Present in a generally organized way on school, work, and community topics, and on researched topics, while discussing events and experiences in various time frames. (Presentational Speaking)
3. Write on topics related to school, work, and community in a generally organized way, using simple paragraphs about events and experiences in various time frames. (Presentational Writing)
4. Interpret the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies, while grasping a few details of what is overheard in conversations, even when something unexpected is expressed, and sometimes follow what is heard about events and experiences in various time frames. (Interpretive Listening)
5. Interpret the main idea of texts related to everyday life, personal interests, and studies, and sometimes follow stories and descriptions about events and experiences in various time frames. (Interpretive Reading)

CHN 290 Chinese Language and Culture through Application (4) KCC AA/AH and KCC AS/AH

4 hours lecture per week

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

Comment: Previously CHNS 290. Students must be native or bilingual speakers of Chinese and English or advanced level Chinese speaking students. Students with prior Chinese language experience, including any dialect of Chinese, should take the placement test at the Lama Testing Center (<https://guides.library.kapiolani.hawaii.edu/testing>) before registering or contact the instructor.

CHN 290, Chinese Language and Culture through Application, is created specially for native, bilingual speakers and advanced students of Mandarin Chinese. The course is designed to enhance students' bilingual (English and Mandarin Chinese) skills and cross-cultural understanding, and to develop students to become better citizens through service learning. Application of meaningful real world community service experiences, cultural readings, and personal reflections will serve as the basis for communicative activities in class. Discussions, critical thinking assignments, and writing assignments in both Chinese and English will be required. Classes will be conducted in both English and Mandarin Chinese.

Upon successful completion of CHN 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 and KCC AS/NS

3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in PHYS 170; **and** credit in MATH 231 **or** credit or concurrent enrollment in MATH 243.*

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:

1. Solve problems to demonstrate an understanding of forces, resultants, equilibrium, trusses, frames, machines, centroids, moments of inertia, friction, and internal forces/moments.
2. Utilize analytical reasoning to analyze engineering structures subjected to concentrated loads, distributed loads, and frictional forces.
3. Utilize numerical techniques to investigate the design of engineering structures.
4. 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 and KCC AS/NS

3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in CE 270; **and** credit in MATH 232 **or** credit or concurrent enrollment in MATH 244.*

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 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 or consent of instructor. Comment: Letter grade only. CHW 135 may not be audited. CHW 135 may not be taken credit/no credit.

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; or consent of instructor.

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).
2. Identify and demonstrate appropriate use of screening tools for vulnerable populations.
3. Identify, demonstrate and evaluate the attitudes, skills and knowledge required to effectively engage individuals in case management services.
4. Explain and apply professional, ethical and cultural considerations in case management.
5. Recognize appropriate follow-up and documentation responsibilities in case management.
6. Demonstrate the ability to work as an effective member of a care coordination team through class activities.

CHW 145 Community Health Worker Practicum (4)

8 clinical hours and 4 hours classroom seminar per week

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

CHW 145 provides 120 hours of supervised practical experience, plus 60 hours of classroom seminar that allows the CHW student to apply the concepts and skills developed from classroom experience to the unique needs of their community, as well as develop and hone professionalism as a CHW. 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 (2)

2 hours lecture per week

Comment: Effective Fall 2019 CULN 111 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 in Hawai'i today. Students will identify job qualifications and opportunities, professional standards, communication skills, and attitudes essential for successful workers in the industry along with exploring contemporary topics of the science of taste and agricultural product identification.

Upon successful completion of CULN 111, the student should be able to:

1. Explain the historical, social, and cultural forces that have affected and shaped the culinary industry.
2. Identify common agricultural products and explain their similarities and differences.
3. Apply the science of taste perception to evaluate food and ingredients (sensory evaluation).
4. Simulate steps to seek, apply for, attain, and retain employment in culinary and hospitality industry careers based on personal preferences and industry standards
5. Identify and explain the various kinds of commercial and industrial food operations, and service styles in the industry today.
6. Analyze job qualifications and opportunities, professional standards, communication skills, and attitudes essential for successful workers in the industry.

CULN 112 Sanitation and Safety (2)

4 hours lecture per week for 8 weeks or 2 hours lecture per week for 16 weeks

Comment: Effective Fall 2019 CULN 112 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

1. Identify the basic principles of sanitation and safety and to be able to apply them to the food service operations.
2. Reinforce personal hygiene habits and food handling practices that protects the health of the consumer.

CULN 115 Menu Merchandising (2)

2 hours lecture per week

Comment: Effective Fall 2019 CULN 115 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

1. Apply the principles of menu planning and layout to the development of menus for a variety of facilities and service.
2. Demonstrate sustainability practices as a means for controlling operating costs and for being good environmental stewards.

CULN 126 Culinary Fundamentals (4)

0.5 hours lecture, 10.5 hours lab per week

Comment: CULN 126 may be offered as a full semester course or as 8-week modules or as a 6-week summer course. CULN 120 will no longer be taught beginning in Fall 2022 and will be replaced by CULN 126, Culinary Fundamentals, for all program requirements. Effective Fall 2019 CULN 126 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 126 provides an introduction to the fundamental concepts, skills, and techniques of food preparation. Course coverage includes the use of standardized recipes, basic cooking methods for meats, stocks, soups, sauces, seafood, vegetables, and starches. Students will learn to identify, use, and maintain all equipment, tools, and utensils in a safe and sanitary manner.

Upon successful completion of CULN 126, the student should be able to:

1. Demonstrate skills in knife, tool and equipment handling, and applying principles of food preparation to produce and evaluate a variety of food products.
2. Identify and apply industry safety and sanitation standards including the safe handling and storage of food products along with good personal hygiene/grooming standards.
3. Recognize and demonstrate entry-level proficiency in technical skills required in the culinary industry according to the American Culinary Federation.
4. Apply mise en place to organize a workstation in a timely manner.

CULN 136 American and Sustainable Cuisine (4)

.5 hours lecture, 7.5 hours lab per week

*Prerequisite(s): A grade of "C" or higher in CULN 126 **or** consent of instructor*

Comment: CULN 136 may be offered as a full semester course or as 8-week modules or as a 6-week summer class. CULN 136 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 136 focuses on the application of basic concepts, skills, and techniques acquired in the culinary fundamentals course. Production of meals through short order cookery found in quick service food service establishments with the emphasis in American Regional Cuisine and sustainability. Includes experiences in quantity food production, fabrication of proteins, breakfast cookery, analyzing quality of foods prepared and application of portion controlling.

Upon successful completion of CULN 136, the student should be able to:

1. In an operational setting, develop and implement fundamentals of cookery skills..
2. Develop knowledge and history of American Regional Cuisine and demonstrate its cuisines through cooking assignments.
3. Demonstrate sustainable practices as a means to control operating cost and being good environmental stewards.
4. Identify, assess and apply appropriate profess
5. In an operational setting, implement mise en place to organize a workstation in a timely manner.

CULN 151 Baking Fundamentals (4)

0.5 hours lecture, 10.5 hours lab per week

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

Comment: CULN 151 may be offered as a full semester course or as 8-week modules or as a 6-week summer class.

CULN 151 introduces 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 identify the basic baking concepts and techniques in preparing items such as quick breads, yeast breads, pies, cakes, cookies, dessert sauces, custards, and creams.

Upon successful completion of CULN 151, the student should be able to:

1. Identify various food products, equipment, baking principles and techniques typically used in a production bake shop.
2. Identify standardized recipes, formulas and conversions, measurements, and baker's percentage.
3. Apply the fundamentals of baking science to the preparation of a variety of products.
4. Demonstrate and evaluate skills in the preparation of various food products in a production bake shop.

CULN 156 Artisan Breads and Pastries (4)

1.5 hours lecture, 10.5 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 151

Upon successful completion of CULN 156, the student should be able to:

1. Identify and safely demonstrate individual culinary skills and practices necessary in the professional bakery with an emphasis on function and identification of ingredients and the different mixing methods involved in the process, utilizing equipment and tools of the culinary trade.
2. Identify, produce, and evaluate bakery products with emphasis on balancing proper flavors, seasoning, textures and using baking terminology, and pleasing visual presentation.
3. Identify and employ the use of standardized recipes, formulas and conversions, measurements, food cost formulas and baker's percentage.
4. Define and demonstrate professionalism and teamwork and develop proper work habits and ethical behavior in the culinary workplace.

CULN 161 Dining Services (4)

.5 hours lecture, 10.5 hours lab per week

Comment: CULN 160 will no longer be taught beginning in Fall 2022 and will be replaced by CULN 161, Dining Services, for all program requirements.

CULN 161 offers 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, practices, responsibilities and liabilities associated with alcohol service.

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

1. Demonstrate knowledge of guest service and customer relations in the dining room.
2. Demonstrate knowledge of non-alcoholic and alcoholic beverages.
3. Explain laws and procedures related to responsible alcohol service
4. Demonstrate professional behavior as required by the culinary industry.
5. Demonstrate quality customer service using a variety of service styles.

CULN 207 Culinary Competition I (4)

1.5 hours lecture, 10.5 hours lab per week

*Prerequisite(s): A grade of "C" or higher in CULN 126 **and** a minimum overall GPR of 2.0; **and** successful completion of a practical skills exam **or** consent of instructor.*

Comment: Effective Fall 2019 CULN 207 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

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 (5)

1.5 hours lecture, 10.5 hours lab per week

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

Comment: Effective Fall 2019 CULN 208 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 which 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 student should be able to:

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 225 European/Mediterranean Cuisine (4)

1.5 hours lecture, 10.5 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 136 or consent of instructor. Comment: CULN 225 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies

CULN 225 focuses on the expansion of competencies gained in prior culinary courses, emphasizing creativity and the refining and perfecting of skills and techniques acquired; specializing in dishes typically served in an upscale restaurant with special emphasis on the European/Mediterranean cuisines.

Upon successful completion of CULN 225, the student should be able to:

1. Identify, prepare and execute the cuisines of Europe and the Mediterranean using their techniques and ingredients.
2. Explain the significance of European and Mediterranean cuisines in regards to their history and geography.

CULN 226 Asia Pacific Cuisine (4)

1.5 hours lecture, 10.5 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 136 or consent of instructor.. Comment: CULN 226 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies

CULN 226 focuses on basic classical Asian and Pacific cookery techniques that have evolved into the culinary concepts and flavors utilized in Pacific Rim and Hawaii Regional cuisine. Through the production of a contemporary menu, students learn about cooking techniques, specialty ingredients, seasonal foods, spices, and herbs.

Upon successful completion of CULN 226, the student should be able to:

1. Compare and evaluate the similarities and differences of the Asian and Pacific Island cuisines.
2. Prepare Asian and Pacific Island cuisines using culinary traditions, artistry, and special uses of fruits, vegetables, spices, herbs, and cooking ingredients.
3. Design and execute a contemporary menu course using Asian and Pacific Island cooking techniques

CULN 231 Food Innovation (4)

.5 hours lecture, 10.5 hours lab per week

*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 126 **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.*

Comment: Effective Fall 2019 CULN 231 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 231 focuses 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. A research experience emphasizing the application of the scientific method in Food Product Development is offered in CULN 231.

Upon successful completion of CULN 231, the student should be able to:

1. Demonstrate the overall concept of food product development and processing
2. Apply culinary knowledge to commercial food manufacturing.
3. Apply the scientific method to develop a new food product.
4. Practice standards in behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 240 Garde Manger (4)

2 hours lecture, 6 hours lab per week

*Prerequisite(s): A grade of "C" or higher in CULN 136 **or** consent of instructor or the Culinary Department Chairperson.*

Comment: Effective Fall 2019 CULN 240 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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, canapes, 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 student should be able to:

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)

0.5 hours lecture, 10.5 hours lab per week

*Prerequisite(s): A grade of "C" or higher in CULN 156 **or** consent of instructor or the Culinary Department Chairperson.*

Comment: Effective Fall 2019 CULN 252 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 (pâte feuilletée), sugar dough (pâte sucrée) éclair paste (pâte 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 student should be able to:

1. Demonstrate skills in advanced decorating techniques and complex preparations of plated desserts, French pastries, and classical and international dessert products.
2. Discuss and prepare a variety of international and classical pastries and desserts.
3. Prepare a variety of desserts acceptable to industry standards.
4. Prepare, analyze and define ice creams, sorbets, and other frozen desserts.

CULN 253 Confiserie (4)

0.5 hours lecture, 10.5 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 156 or consent of instructor or the Culinary Department Chairperson.

Comment: Effective Fall 2019 CULN 253 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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. Prepare a variety of advanced baking products, wedding cakes and chocolates.
2. Prepare and demonstrate advanced confection techniques with regards to sugar and chocolate.
3. Demonstrate the ability to plan, prepare and analyze bakery showpieces for display and buffet.
4. Classify, evaluate and discuss the more advanced techniques and complex preparations of pastry, confections and dessert products.
5. Demonstrate proficiency in specialized bakery equipment and tools.
6. Analyze and compare all products using industry standards in order to assess and evaluate cost control issues in the bakeshop.

CULN 272 Hospitality Purchasing and Cost Control (5)

5 hours lecture per week

Prerequisite(s): A grade of "C" or higher in CULN 126 or consent of instructor or the Culinary Department Chairperson.

Corequisite(s): CULN 272L.

Comment: Effective Fall 2019 CULN 272 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 272 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 272, the student should be able to:

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 272L Hospitality Purchasing and Cost Control Lab (1)

3 hours lab per week

Prerequisite(s): A grade of "C" or higher in CULN 126 or consent of instructor or the Culinary Department Chairperson. Corequisite(s): CULN 272.

Comment: Effective Fall 2019 CULN 272L has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 272L 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 272L, the student should be able to:

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. Demonstrate 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 foodservice 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

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

Comment: Effective Fall 2019 CULN 310 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

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 Associate in Science degree in Culinary Arts with a specialization in Culinary Arts program **or** consent of instructor.*

Comment: Effective Fall 2019 CULN 321 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

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)

1 hour lecture, 6 hours lab per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Culinary Arts with a specialization in Culinary Arts program **or** consent of instructor.*

Comment: Student must purchase Asian specialty knives and tools at an approximate cost of \$200. Effective Fall 2019 CULN 322 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

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 to 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 Associate in Science degree in Culinary

Arts with a concentration in Culinary Arts program or consent of instructor. Comment: CULN 330 is repeatable for a maximum of three credits with consent of instructor. Student must purchase specialty knives and tools at an approximate cost of \$200. Effective Fall 2019 CULN 330 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 330 (Alpha) 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 student should be able to:

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 330B Special Culinary Topics: Food Science and Modernist Cuisine (3)

1 hour lecture, 6 hours lab per week

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

Comment: CULN 330B is repeatable for a maximum of six credits with consent of instructor. Student must purchase specialty knives and tools at an approximate cost of \$200. Effective Fall 2019 CULN 330B has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

CULN 330B appraises the advanced level culinary cuisine topic of Food Science and the Modernist Cuisine that builds upon culinary and managerial skills learned in the AS degree level of culinary and/or pastry arts. Modernist cuisine is an approach to food that values pure flavors, precise execution, and the scientific method to advance the art of cooking. Students will synthesize into their learning knowledge of the theories of food science along with hands-on experimentation in a culinary kitchen.

Upon successful completion of CULN 330B, the student should be able to:

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

CULN 360 Beverage Service Management (3)

3 hours lecture per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Culinary Arts with a specialization in Culinary Arts program **or** consent of instructor.*

Comment: Effective Fall 2019 CULN 360 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

1. Integrate the knowledge, skills and attitudes in all areas of advanced culinary arts necessary to prepare qualified students for professional level careers in the contemporary culinary industry.
2. Synthesize the conceptual, managerial and technical skills necessary to achieve a successful career in the culinary/food service industry.
3. Incorporate within their work ethic the standards in attendance, behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

CULN 380 Nutritional Cuisines (3)

1 hour lecture, 6 hours lab per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Culinary Arts with a specialization in Culinary Arts program **or** consent of instructor.*

Comment: Effective Fall 2019 CULN 380 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

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 student should be able to:

1. Integrate the knowledge, skills and attitudes in all areas of advanced culinary arts necessary to prepare qualified students for professional level careers in the contemporary culinary industry.
2. Synthesize the conceptual, managerial and technical skills necessary to achieve a successful career in the culinary/food service industry.
3. Incorporate within their work ethic the standards in attendance, behavior, grooming and dress that reflect the mature work attitude expected of industry professionals.

DANCE

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

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 and KCC AS/AH

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 and KCC AS/AH

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 and KCC AS/AH

1.5 hours lecture, 3 hours lecture/lab per week

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 and KCC AS/AH

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. Perform the basic step vocabulary and hand/implement movements associated with the traditional hula learned in the class.
2. Explain, verbally or in writing, the histories, persons and mythologies, including kaona, referenced in the mele and oli studied.
3. Perform all hula learned in the course in unison, with lyrical expression of the text, and understanding of the significance of what one is dancing.
4. Prepare adornments and explain their significance for the specific hula performed.
5. Discuss the differences between traditional and modern styles of hula and the significance of hula within traditional Hawaiian culture.

DNCE 213 Modern Hula (3) KCC AA/DA and KCC AS/AH

1.5 hours lecture, 3 hours lecture/lab per week

Comment: DNCE 213 may be taken for a 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 which can be developed creatively and used in social situations.

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

1. Perform basic step vocabulary using appropriate hand gestures and hula instruments associated with modern hula learned in class.
2. Explain, verbally or in writing, the histories, stories or places, including kaona, referenced in the mele studied.
3. Perform all hula learned in the course in unison, with lyrical expression of the text, and understanding of the significance of what one is dancing.
4. Prepare adornments and explain their significance for the specific hula performed.
5. Discuss the differences between traditional and modern styles of hula and the place of hula within modern Hawaii.

DENTAL ASSISTING

DENT 100 Essentials of Dental Assisting (3)

3.75 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 the 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. DENT 100 may not be audited. DENT 100 may not be taken credit/no credit.

DENT 100 offers 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. Implement infection control protocols to prevent disease transmission.
2. Identify and utilize dental instruments and equipment for various dental procedures.
3. Apply the principles of four-handed dentistry.
4. Respond appropriately to medical emergencies in the dental office.
5. Identify and manage special accommodations for medically compromised patients.
6. Maintain accurate patient records as a measure of risk management and part of complete patient healthcare delivery.
7. Apply effective patient management techniques and communication skills.
8. Apply theoretical knowledge in real-world clinical settings through participation in clinical externship experiences at community health clinics. This includes observing and providing care to vulnerable populations through shadowing and active participation.

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 the 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. DENT 100L may not be taken credit/no credit. Dental Assisting is a select admission program. Majors must be identified in order to register for program courses.

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. Implement infection control protocols and OSHA safety measures in clinical and laboratory settings.
2. Utilize and maintain dental instruments, materials, and equipment effectively.
3. Apply principles of four-handed dentistry in clinical practice.
4. Accurately perform dental charting and document oral manifestations of systemic conditions as communicated by the dental professional.
5. Identify medical emergencies and demonstrate appropriate clinician responses.
6. Capture, analyze, and utilize dental photographs to document dental conditions and assist in treatment planning.
7. Apply theoretical knowledge in real-world clinical settings through participation in clinical externship experiences at community health clinics. This includes observing and providing care to vulnerable populations through shadowing and active participation.

DENT 103 Dental Materials (1)

1.25 hours lecture per week for 12 week

*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 the 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 various dental materials and relate them to different dental procedures.
2. Describe the use of product safety information for dental materials.
3. Identify different impression materials and describe their characteristics.
4. Discuss the need for and uses of various dental appliances.
5. Discuss the different types of dental models used in dentistry.
6. Discuss and demonstrate the fabrication of provisional restorations.
7. Discuss tooth whitening procedures and their indications.
8. Identify and describe restorative dental materials used in various procedures.
9. Demonstrate the techniques for taking dental impressions on a variety of patients.
10. Discuss the different types of prosthodontic appliances and their uses.

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 the 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. DENT 103L 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. Prepare dental materials for restorative procedures.
3. Use composite restorations.
4. Take alginate impressions on various patients.
5. Prepare gypsum dental models.
6. Mix different cements, liners, and bases.
7. Fabricate provisional crowns.
8. Assist with and/or place and remove matrix retainers, matrix bands, and wedges.

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 the 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. DENT 105 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. Describe the purpose and function of each body system.
2. Locate and identify various skeletal, muscular, circulatory, and neurological structures of the head and neck, and parts of the salivary system and paranasal sinus structures.
3. Name and identify structures in the oral cavity and describe the development of human dentition and supporting structures.
4. Describe the general and specific features of teeth in the permanent dentition and identify oral manifestations of systemic conditions.
5. Identify and discuss pathology of the oral cavity and relate it to systemic conditions.
6. Relate current trends in dental care derived from articles in professional publications and explain the importance of such trends in the field.
7. Manage infection and hazard control protocols consistent with published professional guidelines and describe the importance of these practices.

DENT 106 Dental Radiography (1)

1.25 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 the 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. DENT 106 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 discovery of x-rays, their role in dentistry, and the principles of electromagnetic radiation.
2. Identify the importance of radiation safety measures and adhere to OSHA and Hawaii State guidelines for x-ray safety.
3. Contrast different imaging techniques, explain the importance of proper phosphor plate or sensor placement, and identify technique and processing errors with corrective measures.
4. Identify the components of the x-ray machine and describe the appearance of various dental restorations on radiographic images.
5. Identify anatomical landmarks to aid in the proper sequencing, interpretation, and diagnosis of dental images, including the identification of caries, periodontal disease, trauma, pulpal lesions, and periapical lesions.
6. Explain the importance of clinical examination and the interpretation of dental images in diagnosing periodontal disease and other dental conditions.
7. Educate patients about dental imaging options and procedures, ensuring they understand the process and importance of x-ray safety.

DENT 106L Dental Radiography Lab (1)

3.75 hours 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 the 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 106L 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 the use of various radiographic techniques, including bisection-of-the-angle and paralleling, on both mannequins and patients.
2. Expose, capture, and correctly sequence diagnostic full mouth quality images using Phosphor plates and sensors on mannequins, classmates, and patients.
3. Practice strict radiation safety measures during all radiographic procedures.
4. Adhere to infection control protocols while performing radiographic procedures.
5. Assemble and use positioning devices proficiently during radiographic imaging.

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 the 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. Letter grade only. DENT 108 may not be audited and may not be taken credit/no credit.

DENT 108 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. Students will apply the knowledge and skills they acquired during the didactic phase of the program (first 12 weeks) in the clinical setting participating in delivery 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. Apply the concept of four-handed dentistry with competence.
2. Identify instruments and perform efficient instrument transfer.
3. Apply infection control procedures in a clinical environment.
4. Assemble tray setups for a variety of dental procedures.
5. Demonstrate the proper use of dental restorative and impression materials and the x-ray machine including processing films.

DENT 200 Dental Office Administration (3)

3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in DENT 100 **and** a grade of "C" or higher in 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 Hawaii. Using this system students will familiarize themselves with patient records, insurance claims filing, charting, 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, and with other dental professionals and insurance companies.

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

1. Demonstrate proper phone courtesy, handle different types of phone calls, and effectively communicate both internally and externally.
2. Prepare, send, and manage written communications and documentation forms, accurately describing patient records.
3. Manage inventory systems and maintain proper record-keeping practices as measures of risk management and complete patient healthcare delivery.
4. Modify schedules, patient records, treatment plans, and insurance claims using dental office computer software.
5. Integrate various office management functions, including accounts receivable and payable, using dental computer software.

DENT 203 Dental Materials II (2)

1 hour lecture, 3 hours lab per week

*Prerequisite(s): A grade of "C" or higher in DENT 103 **and** a grade of "C" or higher in DENT 103L.*

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

Comment: Letter grade only. DENT 203 may not be audited. DENT 203 may not be taken credit/no credit.

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 with 90% accuracy.
2. Create accurate study model fabrications within a specified timeframe.
3. Fabricate various dental appliances according to given specifications.
4. Fabricate multi-unit provisional coverage that meets clinical standards.
5. Analyze different types of cements and their uses in specialty practices, demonstrating understanding through written assessments.
6. Demonstrate the use of dental materials in surgical specialties with 85% accuracy.
7. Perform the duties of a clinical assistant in a specialty practice, including setting up equipment and assisting with procedures, with 90% competency.

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. Use the elements of clinical descriptions to accurately discuss the pathology of the oral cavity.
2. Describe the steps for differential and definitive diagnosis.
3. Define terms for the inflammatory process and explain the impact of immune deficiency and opportunistic infections.
4. List measures to lower cancer risk and describe characteristics of hereditary and congenital disorders.
5. Analyze oral implications from case studies of systemic conditions and list oral manifestations of these conditions.
6. Explain the development of human dentition and discuss the impact of oral diseases on overall health.

DENT 206L Dental Radiography II (2)

4 hours lecture/lab per week in a clinical setting

*Prerequisite(s): A grade of "C" or higher in DENT 106; **and** a grade of "C" or higher in 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.

DENT 206L provides students an opportunity to 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. Use XCP instruments proficiently on a variety of patients ensuring proper technique and positioning to achieve diagnostic quality images.

2. Apply the bisection-of-the-angle and paralleling techniques proficiently.
3. Expose and process diagnostic-quality bitewing radiographs for both adult and child patients.
4. Identify anatomical landmarks, anomalies, and radiographic artifacts in dental radiographs.
5. Implement radiation safety measures while taking radiographs.
6. Perform radiography review exams and labeling exercises with at least 75% accuracy to prepare for the Dental Assisting National Board (DANB) Exam.

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

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

Prerequisite(s): A grade of "C" or higher in DENT 108.

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

Comment: Letter grade only. DENT 208 may not be audited. DENT 208 may not be taken credit/no credit. Liability insurance must be in effect for clinical courses.

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 protocols consistent with published professional guidelines.
2. Perform a variety of instrument transfers and assist with gathering dental records, including photographs, radiographs, and impressions.
3. Identify the different dental specialties and associate specialty instruments and their specific functions.
4. Prepare tray setups for various procedures and demonstrate other skills required for assisting in different specialty practices.
5. Identify and accommodate treatment modifications for special needs patients.
6. Identify and accommodate treatment modifications for geriatric patients.
7. Achieve at least 75% of participation standards by actively engaging in clinical experience seminars and through discussions and collaborative activities.

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

1 hour seminar per week

Recommended Preparation: Two years of work experience as a dental assistant or acceptance into the Certificate of Achievement in Dental Assisting Program or satisfactory completion of the Certificate of Competence in 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: DENT majors must take DENT 210 for a letter grade because it is a required course for the the Certificate of Achievement in Dental Assisting program. Non-majors may take the course credit/no credit. DENT 210 may be audited. DENT 210 is offered in the Spring semester only.

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. Successfully complete with a minimum score of 75% the 3-part Practice Dental Assisting National Certified Dental Assistant Exam, which includes: General Chairside (GC), Infection Control (ICE), and Dental Radiology (RAD).