#### ACCOUNTING

## **ACC 124 Principles of Accounting I (3)**

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 22 or qualification for a higher-level English course or (c) Consent of Instructor, or the Accounting Program Coordinator, or Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in SP 151 or credit or concurrent enrollment in SP 251.

Comment: The sequence of ACC 124, ACC 125 and ACC 202 is equivalent to the sequence of ACC 201 and ACC 202, and vice versa. The ACC 124 and ACC 125 sequence is transferable to other University of Hawai'i community colleges, the University of Hawai'i - West O'ahu, or the University of Hawai'i at Hilo. The ACC 124 and ACC 125 sequence also satisfies the ACC 201 entrance requirement to the University of Hawai'i at Mânoa Shidler College of Business, but does not provide transfer credits towards graduation.

ACC 124 introduces basic accounting principles and practices for service and merchandising businesses. Areas include: accounting as an information system, the accounting cycle, financial statements, internal control, current and long-term assets, and current liabilities and payroll. Special emphasis will be placed upon the practical application of accounting principles.

Upon successful completion of ACC 124, the student should be able to:

- 1. Complete the accounting cycle from source documents to financial statements with emphasis on practical application of accounting principles.
- 2. Analyze, record, report and interpret business activities of a service and/or merchandising organization using current accounting and ethical standards.
- 3. Demonstrate effective communication and teamwork skills.

#### ACC 125 Principles of Accounting II (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 124 and qualification for ENG 22 or qualification for a higher-level English course or consent of Instructor, or the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in SP 151or credit or concurrent enrollment in SP 251.

Comment: The sequence of ACC 124, ACC 125 and ACC 202 is equivalent to the sequence of ACC 201 and ACC 202, and vice versa. The ACC 124 and ACC 125 sequence is transferable to other University of Hawai'i community colleges, the University of Hawai'i - West Oahu, or the University of Hawai'i at Hilo. The ACC 124 and ACC 125 sequence also satisfies the ACC 201 entrance requirement to the University of Hawai'i at Mânoa Shidler College of Business, but does not provide transfer credits

towards graduation.

ACC 125 continues the study of financial accounting procedures. Areas include: long-term assets, long-term liabilities, accounting for corporations and/or partnerships.

Upon successful completion of ACC 125 the student should be able to:

- 1. Apply financial accounting procedures with an emphasis on long-term assets, long-term liabilities, and equity to include corporations and/or partnerships.
- 2. Demonstrate effective communication and teamwork skills.

#### ACC 132 Payroll and Hawai'i General Excise Taxes (3)

*3 hours lecture per week* 

Prerequisite(s): Concurrent enrollment in ACC 124 or concurrent enrollment in ACC 201 or consent of the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in ICS 101; **and** either qualification for ENG 100 or ESL 100 or higher level English **or** credit or concurrent enrollment in ENG 22, ESOL 94S or ESOL 94F.

ACC 132 introduces principles, manual and computerized procedures, and terminology for business application of payroll accounting. This course also teaches students to prepare federal and Hawai'i state forms for payroll taxes and the Hawai'i General Excise and Use Tax. The course content of ACC 132 prepare students for the payroll certification examinations offered by the American Payroll Association, such as Fundamental Payroll Certification (FPC) and/or Certified Payroll Professional (CPP). This course is designed as a recommended course for certain advanced ACC courses, but also serves those students seeking immediate employment as payroll clerks.

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

- 1. Ethically and accurately prepare and report payroll accounting according to federal and state laws.
- 2. Ethically and accurately complete Hawai'i General Excise and Use tax forms.
- 3. Record payroll transactions using appropriate computerized software.
- 4. Demonstrate effective communication and teamwork skills.

### **ACC 134 Individual Income Tax Preparation (3)**

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 22 or qualification for ESOL 94F or qualification for ESOL 94S or qualification for an equivalent course or consent of instructor, or the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in ICS 101.

ACC 134 introduces the preparation of federal and state of Hawai'i individual income tax

returns with an emphasis on law and regulations and their application to the tax returns. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional. The student will learn to conduct basic tax research using a tax research database and/or other resources online. The student will also learn to prepare tax returns both manually and by using commercial tax preparation software such as CCH Prosystem fx ® Tax (CCH, Commercial Clearing House, a division of Wolters Kluwer), Intuit ProConnect TM Tax, or others.

Upon successful completion of ACC 134, the student should be able to:

- 1. Ethically and accurately apply federal and state laws to prepare individual tax returns.
- 2. Use basic tax research techniques.
- 3. Demonstrate effective communication and teamwork skills.

#### **ACC 137 Business Income Tax Preparation (3)**

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 134 or consent of instructor or the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in ICS 101.

ACC 137 introduces Federal and Hawai'i tax laws and regulations and basic return preparation for business entities. This course is intended for an individual preparing basic tax returns under the supervision of an accounting professional. The student will learn to conduct basic tax research using a tax research database and/or other resources online. The student will also learn to prepare tax returns both manually and by using commercial tax preparation software such as CCH Prosystem fx ® Tax, Intuit ProConnect TM Tax, or others.

Upon successful completion of ACC 137, the student should be able to:

- 1. Ethically apply federal and state laws to prepare tax returns for business entities.
- 2. Use basic tax research techniques.
- 3. Demonstrate effective communication and teamwork skills.

#### **ACC 201 Introduction to Financial Accounting (3)**

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100 or qualification for an equivalent course or consent of instructor or the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in ICS 101.

ACC 201 introduces accounting principles and practices used to record and communicate

financial information. Methods for valuating assets, liabilities, and equity of an organization will be analyzed. The student will be introduced to the purpose and fundamentals of ethics and internal controls.

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

- 1. Complete the accounting cycle for a service and merchandising organization using current accounting standards.
- 2. Analyze the effects of business transactions on the financial statements of an organization.
- 3. Identify and apply basic internal control principles and accounting ethics in a business setting.
- 4. Demonstrate effective communication and teamwork skills.

#### ACC 202 Introduction to Managerial Accounting (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 201 or a grade of "C" or higher in both ACC 124 and ACC 125 or consent of the instructor or the Accounting Program Coordinator or the Business, Legal & Technology Education Department Chairperson. Recommended Preparation: Credit or concurrent enrollment in ICS 101.

ACC 202 introduces managerial accounting methods for evaluating performance including cost accounting, budgeting, break-even analysis, ratio analysis, standard cost systems, and reporting for internal decision making.

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

- 1. Analyze, record, report and interpret business activities of manufacturing and other organizations using current accounting standards and technology.
- 2. Prepare information and reports that may be used by management for planning, control and decision making purposes.
- 3. Demonstrate effective communication and teamwork skills.
- 4. Evaluate alternatives using various methods of entity-wide and project financing.

#### **ACC 221 Practical Intermediate Accounting (3)**

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in both ACC 124 and ACC 125 or a grade of "C" or higher in ACC 201 or the consent of the Accounting Program Coordinator or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in SP 151 or credit or concurrent enrollment in SP 251; and credit or concurrent enrollment in ICS 100 or credit or concurrent enrollment in ICS 101.

ACC 221 provides in-depth coverage of Generally Accepted Accounting Principles (GAAP) and other concepts, theories, and skills students learned in the introductory accounting courses. Students will learn to apply GAAP recording and reporting

requirements through practice sets and financial accounting research using industry-standard tools such as the Financial Accounting Standards Board (FASB) Accounting Standards Codification ® Professional View or similar research sites. Students also begin to organize accounting company financial and managerial information using spreadsheets and/or other appropriate specialized software.

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

- 1. Demonstrate mastery of the manual accounting cycle and related internal controls, and discuss them within the framework of an accounting information system (AIS).
- 2. Organize accounting information using industry standard tools and protocols.
- 3. Prepare financial statements in accordance with GAAP, analyze them, and interpret them for stakeholders using industry-standard communication practices.
- 4. Use FASB Codification and other research tools to answer basic accounting research questions clearly, concisely and accurately.
- 5. Demonstrate effective communication and teamwork skills.

### ACC 231 (Alpha) Professional Skills (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 221; credit or concurrent enrollment in ACC 134 **and** credit or concurrent enrollment in ACC 255; **or** the consent of the instructor or the Accounting Program Coordinator or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: (a) Credit in ENG 100 or ESL 100 and (b) credit in SP 151 or SP 251.

ACC 231(Alpha) covers the major hands-on practical skills paraprofessional accountants need to know. As the accounting function evolves, topics covered in this course may vary maintain currency with industry standards. Course coverage emphasizes timely real-world situations and provides an opportunity for students to integrate new skills with competencies learned in prerequisite courses. Concepts will be discussed, demonstrated, exercised, and applied primarily through case studies and fieldwork. Successful students will be able to effectively demonstrate the use of their business analytical, teamwork, interpersonal, and communication skills - all at a paraprofessional accountant level.

Upon successful completion of ACC 231 (Alpha), the student should be able to:

- 1. Apply knowledge of the major components and features of an accounting system by providing substantive backup materials needed by supervising accountants or auditors.
- 2. Investigate, describe, and try applications, utilities, or devices that help maintain an accounting entity's audit trail.
- 3. Apply Generally Accepted Accounting Principles, internal control concepts, and ethical guidelines to accounting cases and fieldwork through use of industry-

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standard tools.

- 4. Apply and integrate skills, tools, and knowledge gained through prerequisite Accounting and other course work to demonstrate competency in accounting problem identification and solution.
- 5. Utilize workplace-standard accounting terminology and vocabulary and exhibit a paraprofessional level of conduct in interactions with team members, accounting professionals, and in presentations
- 6. Plan, organize, and carry out as a team a professionally run function that connects Accounting Program students, internal and external stakeholders, and other interested parties.

## ACC 231B Professional Skills: Research, Workpapers, and Systems Simulation (3) 3 hours lecture per week

Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ACC 134; **and** a grade of "C" or higher in ACC 221; **and** a grade of "C" or higher or concurrent enrollment in ACC 255; **or** the consent of the Accounting Program Coordinator or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit in ENG 100 or ESL 100 **and** credit in SP 151 or SP 251.

ACC 231B emphasizes real world situations and provides an opportunity for students to demonstrate outcomes of their learning, critically assess and appropriately apply what has been learned. Through problem-based hands-on learning using industry standard tools such as CCH Accounting Research Manager ®FASB Accounting Standards Codification TM, CCH Tax Research Consultant Lite ®, and CaseWare Working Papers, or similar software. Students will research financial accounting, taxation, and enterprise content management issues using cases from Ernst & Young (EY) Education, Deloitte True Blood Case Studies, or similar software. At the paraprofessional accountant level, students will utilize their business teamwork principles, interpersonal and communication skills to solve business problems.

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

- 1. Apply knowledge of the major components of an accounting system to workpaper problems/cases and fieldwork.
- 2. Investigate and describe the application of content management and document management systems in business.
- 3. Apply Generally Accepted Accounting Principles, internal control concepts, and ethical guidelines to an accounting practice case, to financial accounting research and workpaper problems/cases and fieldwork.
- 4. Apply and integrate skills, tools, and knowledge gained through prerequisite Accounting and other course work to demonstrate competency in complex accounting problem identification and solution.
- 5. Utilize workplace-standard accounting terminology and vocabulary and exhibit a paraprofessional level of conduct in interactions with team members, accounting

- professionals, and in presentations.
- 6. Plan, organize, and carry out as a team a network function that connects accounting professionals, students, faculty, potential employers, and community members

#### ACC 252 Using QuickBooks® in Accounting (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in both ACC 124 and ACC 125 or a grade of "C" or higher in in ACC 201; and credit or concurrent enrollment in ICS 101; or consent of instructor or consent of the Accounting Program Coordinator or consent of the Business, Legal & Technology Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in SP 151 or credit or concurrent enrollment in SP 251.

ACC 252 provides a hands-on approach to computerized accounting using QuickBooks® Online and QuickBooks Desktop. This course applies previously acquired accounting skills and knowledge in a computerized environment to set up and maintain accounting records. Emphasis will be placed on the application of QuickBooks® Online to the accounting cycle. Students will also be exposed to the QuickBooks® Desktop edition. The course content of ACC 252 prepares students for the QuickBooks® Certification Examination.

Upon successful completion of ACC 252 the student should be able to:

- 1. Apply fundamental accounting principles to set up and maintain records using OuickBooks.
- 2. Evaluate and communicate business performance based on various reports.
- 3. Demonstrate effective communication and teamwork skills.

#### ACC 255 Using Excel® in Accounting (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 201 or a grade of "C" of higher in both ACC 124 **and** ACC 125; **and** credit or concurrent enrollment in ICS 101; **or** consent of instructor, the Accounting Program Coordinator or the Business, Legal, & Technology Education Department Chairperson.

Recommended Preparation: Credit or concurrent enrollment in BUS 250 or MATH 115.

ACC 255 provides hands-on training in the use of spreadsheets to solve accounting problems. Coursework involves the application of previously acquired accounting skills and knowledge with emphasis on financial and managerial accounting. This course presents the basic concepts of an accounting information system and methods to

document such systems. In addition, this course reviews basic database concepts, analyzes data using spreadsheets, and covers basic business intelligence concepts.

Upon successful completion of ACC 255, the student should be able to:

- 1. Compile financial data utilizing an electronic spreadsheet, and generate accurate and relevant output.
- 2. Analyze results of accounting problems and use the results to propose business recommendations.
- 3. Explain basic database and data analytics concepts and their applications in accounting.
- 4. Demonstrate effective communication and teamwork skills.

## ACC 261 (Alpha) Accounting Information and Management Systems Topics (3)

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in ACC 252 and a grade of "C" or higher in ACC 255; or consent of instructor, the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit in ENG 100 or ESL 100; and credit in BUS 250 or MATH 115; and credit in SP 151 or SP 251; and credit in ICS 101.

Comment: ACC 261 (Alpha) is repeatable for a maximum of six credits. A student may not repeat the same topic course for additional credit.

ACC 261 (Alpha) covers the hottest accounting technology trends impacting accounting information and management systems. Topics are selected based on high wage, high demand career opportunities currently available in the industry. The course is designed to enhance the ability of students to think critically and to develop the knowledge, skills and attitudes necessary to compete effectively in the rapidly changing world of accounting information technology. Students will research and present how companies are using the selected emerging technologies to enhance their accounting information and management systems.

Upon successful completion of ACC 261, the student should be able to:

- 1. Explain the importance of the selected technology trends in accounting information and management systems.
- 2. Use standard terminology and vocabulary commonly used in the selected technology trends.
- 3. Demonstrate proficiency in the use of the selected technologies.
- 4. Demonstrate effective communication and teamwork skills.
- 5. Demonstrate sound business ethics and perform efficiently at the paraprofessional level.

ACC 261B Accounting Information and Management Systems – Data Analytics (3) 3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ACC 252 **and** a grade of "C" or higher in ACC 255; or consent of instructor, the Accounting Program Coordinator, or the Business, Legal & Technology Education Department Chairperson.

Recommended Preparation: Credit in ENG 100 or ESL 100; and credit in BUS 250 or MATH 115; and credit in SP 151 or SP 251; and credit in ICS 101.

Comment: ACC 261B is repeatable for a maximum of six credits. A student may not repeat the same topic course for additional credit.

ACC 261 (Alpha) covers one of the hottest accounting technology trends impacting accounting information and management systems - Data Analytics. There are numerous high-wage, high-demand career opportunities currently available in this field. The course is designed to enhance the ability of students to think critically and to develop the knowledge, skills, and attitudes necessary to compete effectively in the rapidly changing world of accounting information technology. Students will research and present how companies are using Data Analytics to enhance their accounting information and management systems and make data-driven management decisions.

Upon successful completion of ACC 261, the student should be able to:

- 1. Explain the importance of Data Analytics in accounting information and management systems.
- 2. Use standard terminology and vocabulary commonly used in Data Analytics
- 3. Demonstrate proficiency in the use of Data Analytics software such as Excel, Tableau, and Power BI.
- 4. Demonstrate effective communication and teamwork skills in completing Data Analytics multiple individual projects and a team project.
- 5. Demonstrate sound business ethics and perform efficiently at the paraprofessional level in working with Data.

#### ACC 293 Accounting Internship (3)

1 hour lecture, 8 hours internship per week

Prerequisite(s): Credit or concurrent enrollment in ACC 231B or credit or concurrent enrollment in ACC 261B or consent of instructor, the Accounting Program Coordinator or the Business, Legal, & Technology Education Department Chairperson.

Comment: Letter grade only. May not be audited. May not be taken credit/no credit.

ACC 293 is an internship course involving fieldwork where a student will work at an office, accounting firm, or sponsoring organization. The cooperative arrangement integrates classroom learning with supervised, structured practical work experience. In addition, employment seeking skills such as job searching, resume writing, interviewing, and application form filling. Additionally, professional attitude and attire will be emphasized. A student's background knowledge and skills are considered when recommending students for available positions. The fieldwork supervisors will evaluate the performance of students. Students will also perform self-evaluation and self-

reflection. This course offers the opportunity for students to apply and further develop workplace soft skills and accounting skills.

Upon successful completion of ACC 293, the student should be able to:

- 1. Perform job search using appropriate tools; follow standards of etiquette and practice appropriate oral and written communication skills to apply for and secure available positions.
- 2. Complete assigned job duties and resolve problems independently and as part of a team.
- 3. Analyze and relate the job duties to principles, concepts or procedures covered in the ACC course of study.
- 4. Identify the personal qualities, work habits, work ethics, and attitudes and other competencies determined by the instructor and the employer that lead to professionalism in the work place.

#### AMERICAN SIGN LANGUAGE

## ASL 101 Elementary American Sign Language I (4) KCC AA/HSL

4 hours lecture per week

ASL 101 emphasizes the development of both receptive and expressive skills. Course content includes basic vocabulary, fingerspelling, syntax, and grammatical structures. Everyday communication is the centerpiece of every lesson. Grammar is introduced in context, with an emphasis on developing question and answering skills. Exploration of the history of ASL and cultural aspects within the Deaf community will also be introduced.

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

- 1. Demonstrate the basic syntax in American Sign Language.
- 2. Recognize and produce appropriate grammatical structures, facial grammar, sign vocabulary, personal and possessive pronouns, classifiers and fingerspelling.
- 3. Demonstrate how to sign various types of numbers: cardinal (1-100), ordinal, age, clock time, basic number sentences correctly.
- 4. Demonstrate communicative competence in ASL related to oneself, family, academic, and real-world surroundings.
- 5. Demonstrate how to navigate a signing environment and appropriate greetings and attention getting behaviors.
- 6. Discuss aspects and issues of the Deaf Community, including its culture, the differences between Deaf and Hearing cultures; how Deaf and Hearing people have interacted historically, and the role of ASL in the lives of Deaf people.

#### ASL 102 Elementary American Sign Language II (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ASL 101 or a grade of "C" or higher in an equivalent course or consent of instructor.

ASL 102 builds upon the student's prior knowledge and experience from ASL 101. This course focuses on building narrative skills and developing real-world conversational skills used in everyday discussions. It also develops the receptive and expressive skills, and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language. Increased fluency and accuracy in fingerspelling, numbers and sign vocabulary will be emphasized.

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

- 1. Give and confirm directions, interrupt, use spatial referencing and explain the differences in cardinal and ordinal numbers in ASL.
- 2. Identify and accurately describe people who are present and not present, contrast people, and use numbers in multiples of 5, 10 and 11 in ASL
- 3. Initiate requests, accept or decline offers, use spatial and inflecting verbs, and use numbers when talking about money and whole numbers from 51-75 in ASL.
- 4. Demonstrate relationships, ages and length of time, and the use of whole numbers 67-98 in ASL.
- 5. Contradict opinions and contrast two or more people/things in ASL.
- 6. Discuss aspects of the Deaf Community, including the history of Deaf people and their interactions with hearing people, and the role of ASL in the lives of Deaf people.

## ASL 201 Intermediate American Sign Language I (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ASL 102 or a grade of "C" or higher in an equivalent course or consent of instructor.

ASL 201 emphasizes and expands on grammar, syntax, spatial referencing, classifiers, and vocabulary development. Students will develop effective and fluent ASL expressive and receptive skills. Fluency and accuracy of fingerspelling will be developed as well as the use of lexicalized signs. This course continues to expand knowledge of experiences in ASL and understanding of deaf community, culture and history within the context of their application to ASL skills.

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

- 1. Demonstrate basic, functional conversational skills in ASL through giving opinions, discussing plans and goals, and describing things and places in detail.
- 2. Demonstrate effective production of ASL signs, quantifiers, numerical signs, request signs, lexicalized fingerspelling in complete sentences, and in a narrative structure through signed assignments.
- 3. Recognize ASL grammar features: topic-comment structure, ordinal numbers, referencing, locative, semantic and descriptive classifiers, time signs (recurring

- and continuous), inflecting verbs, role shifting, conditional sentences, when clauses, contrastive structure, and possessive forms.
- 4. Discuss the aspects of the deaf community, culture and history through assigned course materials and videos.
- 5. Incorporate and utilize unique ways to get engaged in conversations using ASL for negotiations, making suggestions, requests, or complaints.

## ASL 202 Intermediate American Sign Language II (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ASL 201 or a grade of "C" or higher in an equivalent course or consent of instructor.

ASL 202 refines the language skills and knowledge acquired in American Sign Language in ASL 101-201, adding more sophisticated ASL grammatical features and vocabulary, short stories, narratives, and dialogues. To increase their fluency and accuracy, students will give descriptions of the objects and places, appropriate sequencing about their life events and "the weekend" stories. This course continues to expand the knowledge and experiences in ASL, and promote students' understanding of the deaf culture, history, and community.

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

- 1. Demonstrate the ability to identify and distinguish objects in ASL.
- 2. Accurately express spatial agreement between the location of the people, places and things in ASL.
- 3. Identify and produce ASL classifiers: locative, descriptive and instrumental.
- 4. Demonstrate advanced proficiency in ASL fingerspelling, numbers, and lexicalized signs.
- 5. Accurately produce a storytelling sequence incorporating all grammatical functions in ASL.
- 6. Compare and contrast the study of ASL and deaf community, culture and history with one's background and life experience..

## ASL 203 Advanced American Sign Language I (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ASL 202 or a grade of "C" or higher in an equivalent course or consent of instructor.

ASL 203 applies knowledge of American Sign Language grammar and vocabulary to the description of increasingly complex constructs, processes and situations. Students will incorporate multiple character roles shifting into medium-length stories, narratives and the discussion of hypothetical issues. Cultural values and attitudes as they relate to the Deaf community are also examined.

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

- 1. Demonstrate advanced grammatical structures in ASL.
- 2. Narrate personal stories following ASL narrative structure.
- 3. Demonstrate narratives and stories in ASL.
- 4. Demonstrate an advanced conversational level of receptive skills in ASL.
- 5. Focus on building narrative skills, moving from an informal to a more formal presentation.
- 6. Distinguish between opinions and facts in ASL.
- 7. Accurately produce sequence classifiers in order to fully describe what happened.

#### ASL 204 Advanced American Sign Language II (4) KCC AA/HSL

4 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ASL 203 or a grade of "C" or higher in an equivalent course or consent of instructor.

ASL 204 that builds on the cultural competence and language skills developed in ASL 203 with increased focus on developing comprehension and production in storytelling skills; continued expansion of knowledge of Deaf culture and Deaf community. This class has a strong emphasis in specialized vocabulary development and receptive skill development. Students learn advanced role shifting, medical topics, storytelling, classifier descriptions, rule description, activity description, etc.

Upon successful completion of ASL 204, the student should be able to:

- 1. Engage in dialogues and illustrate an advanced conversational level of expressive fluency.
- 2. Focus on developing conversational skills used in everyday discussion.
- 3. Narrate personal stories involving multiple people and events in an ASL manner.
- 4. Incorporate a variety of ASL spatial structure correctly into narrations.
- 5. Display understanding of basic ASL fictional storytelling techniques.
- 6. Display the understanding of elaborating the story by giving descriptions, sharing thoughts and giving reasons.
- 7. Focus on money matters and the processes by which people go through when making major decisions.

## ASL 290 American Sign Language and Deaf Culture through Application (4) 4 hours lecture per week

Prerequisite(s): Students must be native, bilingual users of American Sign Language or have completed ASL 202 or equivalent or approval of the instructor.

Comment: ASL 290 is designed for native, bilingual users of American Sign Language and for the advanced level ASL student. Instructor approval is required. ASL 290 is conducted in American Sign Language.

ASL 290 is designed to prepare students to serve as American Sign Language and Deaf Culture resources on campus and in the community through service learning experiences.

Application of the "real world" community service experiences, cultural readings, and personal reflections will serve as the basis for communicative activities in class.

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

- 1. Using ASL, describe diversity and variety of Deaf Culture as identified through service learning experience and assigned readings.
- 2. Demonstrate job-related skills gained from practical work experience in supervised service learning activities.
- 3. Evaluate and integrate the service learning experiences using appropriate vocabulary and grammar in communicative activities, discussions, and projects.
- 4. Using ASL, critique the needs of the Deaf community in classroom discussion, reflective journals, and presentations.
- 5. Apply critical thinking and problem-solving skills related to service-learning experiences and course projects.
- 6. Compare and contrast linguistic and cultural features, perspectives, and values within Deaf Communities and between Deaf Culture and U.S. mainstream (non-signing) culture.
- 7. Assess the relationship between language acquisition, language learning, and culture.
- 8. Effectively communicate in ASL, incorporating Deaf Culture norms.

#### **AMERICAN STUDIES**

## AMST 201 American Experience: Institutions and Movements (3) KCC AA/DH and KCC AS/AH

*3 hours lecture per week* 

Recommended Preparation: ENG 100 or ESL 100.

AMST 201 is an interdisciplinary course that examines continuity, diversity, and changes in American values and lives in an historical context, as manifested in social institutions and social movements. It introduces students to various types of primary materials (fictional and historical narratives, sermons, speeches, legal documents, journalistic accounts, films, etc.) and to different ways of reading and analyzing such materials.

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

- 1. Identify the formation and evolution of some American cultural values in an historical context.
- 2. Identify, examine and evaluate the significance of ethnic, racial, and cultural diversity in American life.
- 3. Identify and analyze major themes in selected narrative, dramatic, and cinematic works dealing with the American experience.
- 4. Identify and examine specific American social movements and their continuing significance.
- 5. Identify and describe the issues involved in socio-economic inequality, and the

- possibilities of social mobility in America.
- 6. Write clearly developed essays that defend the writer's value judgments within the context of specific American cultural values.

#### ANTHROPOLOGY

### ANTH 151 Emerging Humanity (3) KCC AA/FGA and KCC AS/SS

*3 hours lecture per week* 

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

ANTH 151 provides a uniquely long-term perspective on the emergence and global development of humanity over the last 5 million years. This course introduces students to the fossil record of human biological evolution and the archaeology of culture in the world prior to ca. AD 1500. Topics we examine include (but are not limited to): the development of technology, language, and sociopolitical institutions. We will also consider the origins of plant and animal domestication, the genesis of cities and urbanism, and the political and ecological consequences of human impact on the natural environment.

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

- 1. Explicate and detail aspects of human diversity, biological & human evolution, and apply their understanding of ancient societies and cultures to developments that lead to emerging civilization.
- 2. Identify the major theoretical orientations in anthropology and explain how these orientations shape the fieldwork experience.
- 3. Explain how anthropologists study subsystems of culture, including archaeology, economic, kinship, political, religious systems, personality development and cultural change.
- 4. Describe patterns of culture in Asia and the Pacific Islands areas and discuss culture, adaptation, language, political organization or society in Asian and Pacific Island regions.
- 5. Use anthropological perspectives on work to explore career interests in health, human services, education and other fields.

## ANTH 152 Culture and Humanity (3) KCC AA/FGB and KCC AS/SS

3 hours lecture per week

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

ANTH 152 is a critical examination of the modern era through the discipline of Anthropology. In this course, students will investigate the movements of European nations and the impact of colonization on Asia, North and South America and vast expanse of the Pacific Islands. We will study the progress of the great civilizations on

earth and follow trends in globalization and cultural development in the post-1500 world. The course will provide students with a multicultural perspective on the world, and deepen their understanding from a global perspective.

Upon successful completion of ANTH 152, the student should be able to:

- 1. Analyze global issues and events through inquiry and inform her/himself about the historical, geographical, cultural, political, economic, and religious contexts within which these issues must be understood and choices made.
- 2. Identify the world's different political systems, including democracy, and recognize that democracy can be practiced in differing ways.
- 3. Link cultural literacy with language learning and actively pursue linguistic and cultural competencies in languages beyond her/his own.
- 4. Translate global learning into ethical and reflective practice, mindful of the consequences of her/his actions in a locally diverse and globally heterogeneous community.
- 5. Compare and contrast your own and other cultures and the multiple perspectives, values and identities they engender.

#### ANTH 200 Cultural Anthropology (3) KCC AA/DS and KCC AS/SS

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100; and qualification for MATH 82 or qualification for a higher-level mathematics course.

ANTH 200 examines the concept of culture with a focus on culture as an adaptive strategy developed by human populations in response to their environment.

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

- 1. Explain how anthropologists study economic, kinship, political, religious systems, personality development and cultural change.
- 2. Differentiate cross-cultural differences and similarities in Hawai'i's multi-cultural society.
- 3. Describe patterns of culture in Asia and the Pacific Island areas and be able to discuss culture, adaptation, language, political organization or society in Asian and Pacific Island regions.
- 4. Use anthropological perspectives on work to explore career interests in health, human services, education and other fields.
- 5. Identify cross-cultural issues and develop a research paper using literature sources and interviews.
- 6. Express and discuss research results in writing.
- 7. Identify the major theoretical orientations in cultural anthropology and understand how these orientations shape the fieldwork experience.
- 8. Develop a concept of culture that will be useful in analyzing cross-cultural issues in Hawai'i, the United States and the world.

#### ANTH 210 Archaeology (3) KCC AA/DS and KCC AS/SS

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100; and qualification for MATH 82 or qualification for a higher-level mathematics course.

ANTH 210 is an introduction to prehistoric archaeology including methods and techniques of excavation and laboratory analysis. This course is a brief survey of theory in relation to change and diversity in prehistoric human groups.

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

- 1. Identify the interactions between the two major fields of anthropology, physical anthropology and cultural anthropology.
- 2. Identify the methods archaeologists use in gathering material evidence about the human past.
- 3. Analyze and diagnose anatomical and attribute differences, and analyze the process of archaeological inference.
- 4. Identify the major explanatory concepts and theories in archaeology.
- 5. Identify environmental and cultural processes, which shape the archaeological record.
- 6. Identify how archaeologists examine living human populations to gain insights into the formation of archaeological sites and materials.

#### **ART**

# ART 101 Introduction to the Visual Arts (3) KCC AA/DA and KCC AS/AH 3 hours lecture per week

ART 101 focuses on the nature of the visual arts and their expression in various forms.

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

- 1. Apply a knowledge and understanding of the elements of art, the principles of design and the creative process.
- 2. Exhibit a familiarity with major historical and contemporary movements in art and be able to understand how art reflects its time.
- 3. Apply an understanding of the various media.
- 4. Explore the visual arts' influence on the quality of life.
- 5. Become involved in the act of creativity.
- 6. Incorporate writing as a tool for analyzing art forms.

#### ART 104 Introduction to Printmaking (3) KCC AA/DA

6 hours lecture/lab per week

Recommended Preparation: ART 113 or ART 114 or ART 123.

Comment: Letter grade and credit/no credit only. ART 104 may not be audited. Tools and materials for ART 104 will cost approximately \$60.00.

ART 104 - Introduction to Printmaking provides foundation explorations in the processes of relief, intaglio, and stencil printmaking. Direct workshop studio experience in the basic techniques and concepts of wood cut, linoleum cut, drypoint, monotype, and basic stencil processes.

Upon successful completion of ART 104, the student should be able to:

- 1. Demonstrate a knowledge and understanding of the elements of art and the principles of design.
- 2. Employ the skillful use of relief printing materials and equipment.
- 3. Complete the creative problem-solving process, from planning and discovery to implementation and evaluation.
- 4. Apply critical and creative thinking in order to experiment and take risks with the visual work.
- 5. Communicate effectively about the work designed in this course.

#### ART 105 Introduction to Ceramics (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Course materials for ART 105 cost approximately \$100.

ART 105 focuses on three-dimensional concepts in clay; hand-building and wheel-throwing techniques.

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

- 1. Exhibit basic skill competency by producing finished ceramic objects with hand building and wheel throwing techniques.
- 2. Utilize basic drawing skills as a means of notation, conceptualization and visual organization.
- 3. Exhibit an awareness of historic and contemporary examples of ceramics.
- 4. Identify and articulate the concepts and intent of a finished ceramic piece.

#### ART 106J Sculpture-Small Scale, Jewelry (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Letter grade and credit/no credit only. ART 106J may not be audited. Approximate cost for supplies for ART 106J is \$60.00.

ART 106J gives students experience in the fabrication and casting of three-dimensional forms on a small scale including jewelry, small-scale sculpture, and miniature multimedia art. Fabrication techniques may include cutting, joining, surface decorating, and finishing. Casting techniques may include the use of wax and organic materials for the lost wax process.

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

- 1. Successfully use a variety of tools, processes, and techniques in the development of metalwork.
- 2. Successfully apply the visual elements and principles of design.
- 3. Comprehend concept development from planning to execution of metalwork.
- 4. Develop craftsmanship through hand-eye coordination and the process of creative problem solving in the manifestation of metalwork.
- 5. Perform visual communication skills through critique, presentation and discussion.

#### ART 107 Introduction to Photography (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Students must have a film camera with adjustable shutter speed, aperture and light meter. Course materials and supplies will cost from \$150-200 (not counting the cost of a film camera).

ART 107, an introductory course, provides instruction in the elements, principles and techniques of black and white photography. No prior knowledge of photography is required.

Upon successful completion of ART 107, the student should be able to:

- 1. Perform and apply basic photographic techniques such as single lens reflex camera operation, black and white film processing and darkroom print enlargement.
- 2. Apply the fundamental visual, design and camera optical principles.
- 3. Develop knowledge of the traditions and history of photography.
- 4. Experiment by taking risks through the creative problem-solving process: from planning and discovery to implementation and evaluation.
- 5. Develop strong communication skills to effectively critique and analyze photographic imagery.

## ART 107D Introduction to Digital Photography (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Letter grade and credit/no credit only. ART 107D may not be audited. Students must have a digital single lens reflex camera with adjustable shutter speed, aperture and light meter.

ART 107D is an introduction to the technical and aesthetic practices of digital photography. Students will learn basic camera techniques and how to process their images in a digital format.

Upon successful completion of ART 107, the student should be able to:

- 1. Perform and apply basic photographic techniques such as single lens reflex camera operation, digital editing techniques and digital printing.
- 2. Apply the fundamental visual, design and camera optical principles.
- 3. Develop knowledge of the traditions and history of photography.
- 4. Experiment by taking risks through the creative problem-solving process: from planning and discovery to implementation and evaluation.
- 5. Develop strong communication skills to effectively critique and analyze photographs.

### ART 111 Introduction to Watercolor Painting (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Approximate cost of art supplies for ART 111 is \$80.00.

ART 111 offers an introduction to watercolor materials, techniques, vocabulary, and the review of watercolor masters through visual media and demonstration(s).

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

- 1. Select and use watercolor materials.
- 2. Show proficiency in the use of various watercolor techniques.
- 3. Utilize the various art elements and design principles in communicating visual ideas.
- 4. Utilize various design principles in composing a watercolor painting.
- 5. Complete the creative problem-solving process, from planning and discovery to implementation and evaluation.

#### ART 112 Introduction to Digital Arts (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100 or higher level courses in the same area/field (or areas/fields) of study.

Recommended Preparation: ART 115 and basic computer competency skills or higher-level courses in the same area/field (or areas/fields) or study.

Comment: Students are required to purchase design supplies unless utilizing on-campus labs.

ART 112 provides a studio introduction to digital technology and its applications to the production of visual art. Emphasis will also be placed on developing an aesthetic criteria for evaluation.

Upon successful completion of ART 112, the student should be able to:

- 1. Create original digital graphic artwork using appropriate design principles, elements of art, vocabulary, digital graphic software, and digital graphical technological processes.
- 2. Apply problem-solving techniques to develop art projects according to

- specifications, then critique and defend own artwork.
- 3. Use the vocabulary and technological processes of digital graphics.
- 4. Use digital graphics to generate original visual images.
- 5. Use a variety of industry-standard digital graphic software packages and input/output devices.
- 6. Work with vector and bitmap images.
- 7. Apply the visual elements of line, shape, value, color, texture, space, time and motion as well as the design principles of balance, rhythm, emphasis, contrast, variation, and unity in the creation of digital art works.
- 8. Demonstrate basic animation principles and skills.
- 9. Complete the creative problem-solving process from the preliminary planning stage and exploration through revisions to the final product.
- 10. Experiment by taking risks through the process of exploration during the creative process.
- 11. Achieve individual creative decisions.
- 12. Develop strong communication skills (written and oral) to effectively critique and defend coursework.

ART 113, 114, 115, and 116 are intended for potential Art majors, but are also open to other students. These courses are the building blocks for all of the 200 level studio courses.

## ART 113 Introduction to Drawing (3) KCC AA/DA

6 hours lecture/lab per week

Recommended Preparation: ART 101.

Comment: Course materials for ART 113 cost approximately \$75.

ART 113 is an introductory drawing course focusing on the descriptive, expressive, and formal aspects of visual language through drawing practice.

Upon successful completion of ART 113, the student should be able to:

- 1. Use the basic elements of the visual arts (line, value, shape, texture, modeling, pattern, composition) to arrive at an illusion of space, image and form.
- 2. Demonstrate a thorough understanding of basic linear perspective.

#### ART 114 Introduction to Color (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Course supplies and materials for ART 114 will cost approximately \$100.00.

ART 114, an introductory color course, focuses on theory and application of color as related to studio art practice.

Upon successful completion of ART 114, the student should be able to:

- 1. Perceive and describe the multiple dimensions of color: hue, value, intensity and temperature.
- 2. Establish a solid understanding of color interaction, theories and vocabulary.
- 3. Demonstrate skills in paint mixing, matching and application.
- 4. Utilize paper and paint to creatively solve posed color problems.
- 5. Develop a personal sense of color.

#### ART 115 Introduction to 2D Design (3) KCC AA/DA

6 hours lecture/lab per week

Recommended Preparation: Credit in or qualification for ART 101.

Comment: Course materials and supplies will cost approximately \$100.00.

ART 115 is a foundation studio course that focuses on the structure and fundamentals of two-dimensional design. Emphasis is placed on studio projects that introduce the visual elements and apply the principles of design. This is a beginning art course that prepares the student for further study in drawing, painting, sculpture, graphic design, illustration and other advanced visual studies.

Upon successful completion of ART 115, the student should be able to:

- 1. Apply the visual elements and the principles of design.
- 2. Illustrate the concept of structure in design through the use of grid and modular systems.
- 3. Employ the skillful use of design media including paint, paper, rulers, cutting tools, and mounting materials.
- 4. Apply critical and creative thinking within the problem solving process by experimenting and taking risks with the visual work.
- 5. Identify the scope of design in the contemporary world.
- 6. Communicate effectively about the work designed in this course.

## ART 116 Introduction to Three-Dimensional Composition (3) KCC AA/DA

6 hours lecture/lab per week

Comment: Formerly ART 106. ART 116 may not be audited. Approximate cost for supplies for ART 116 is \$80.00.

ART 116 is a foundation course in three-dimensional design and is concerned with a visual dialogue concerning form and space. Elements of art and principles of design are utilized separately and in concert to construct three-dimensional forms. Three-dimensional forms will be constructed using a variety of materials.

Upon successful completion of ART 116, the student should be able to:

- 1. Successfully use a variety of tools, processes, and techniques in the development of three-dimensional ideas about form and space.
- 2. Successfully apply the visual elements of art and principles of design.

- 3. Complete the creative problem-solving process from the preliminary stage and exploration through revisions to the final product.
- 4. List examples of historical and contemporary sculpture.
- 5. Perform visual communication skills through critique, presentation, and discussion.

## ART 120 Introduction to Typography (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112 **and** a grade of "C" or higher in ART 115; **and** satisfactory completion of the Typography entrance portfolio review **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade and credit/no credit only. ART 120 may not be audited.

ART 120 introduces and applies typography terminology, history, and theory through the exploration of letterforms and word compositions using page layout software.

Upon successful completion of ART 120, the student should be able to:

- 1. Design functional, organized and appealing type compositions through the consideration of page size, grid, whitespace, margins, columns, gutters, visual hierarchy and information chunking.
- 2. Select appropriate typefaces based on the function, anatomy, personality and history of the type, relative to the nature and goals of the project.
- 3. Format type with consideration of typeface, size, styles, color, case, alignment, line-length, leading, paragraph spacing, tracking, kerning, along with other typographic considerations.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 7. Design visually appealing page layouts that communicate a typographic message clearly and effectively through the implementation of typographic control, composition and page layout software.

#### ART 123 Introduction to Painting (3) KCC AA/DA

6 hours lecture/lab per week

Recommended Preparation: Credit in or placement in ART 101 and ART 113.

Comment: Course materials for ART 123 will cost approximately \$150.

ART 123 is the beginning painting course on the theory and practice of oil painting. Basic materials and technical procedures will be explored.

Upon successful completion of ART 123, the student should be able to:

- 1. Define and sensitively apply the visual elements of line, shape, light and shadow, color, texture, and space, and the design principles of balance, rhythm, focal points, implied movement and unity to arrive at an illusion of space, image, and form.
- 2. Demonstrate an understanding of the multiple dimensions of color: hue, value, intensity and temperature.

#### **ART 125 Introduction to Graphic Design (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112 and a grade of "C" or higher in ART 115; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade and credit/no credit only. ART 125 may not be audited.

ART 125 introduces various ways of organizing visual elements in page design and examines the conceptual meaning of the type and image in combination. Structural grid systems and design principles are used to organize visual information using page layout software.

Upon successful completion of ART 125, the student should be able to:

- 1. Develop strong concepts to communicate a message based on needs and purpose by exploring the relationship between image, type and meaning.
- 2. Design page layouts using structural grid systems, modules and design principles to organize visual information such as photo, illustration, typography and white space, using page layout software.
- 3. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.
- 6. Design page layouts that communicate a message effectively by integrating content and meaning with visual form.

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit only. ART 126 may not be audited.

ART 126 explores introductory level conceptual and technical topics in 3D computer graphics. Autodesk Maya and related applications will be utilized to develop projects that integrate 3D modeling, UV layout, texture mapping, lighting, and rendering.

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

- 1. Develop 3D models and related art assets using introductory level technical skills, procedures, and production methodologies.
- 2. Employ the vocabulary of 3D computer graphics to define creative objectives and evaluate outcomes.
- 3. Apply knowledge of contemporary industry responses to 3D computer graphics in the development of 3D models and related art assets.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.
- 7. Develop 3D content that integrates multiple stages of the CG pipeline, including: 3D modeling, UV layout, texture mapping, lighting, and rendering.

#### **ART 127 Graphic Symbolism (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112 and a grade of "C" or higher in ART 115; and satisfactory completion of the Graphic Symbolism entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade and credit/no credit only. ART 127 may not be audited.

ART 127 introduces the terminology, history and theory of graphic symbolism and explores shapes and letterforms to create symbols and logos.

Upon successful completion of ART 127, the student should be able to:

- 1. Design visually appealing graphic symbols and/or logos that are mindful of the history and theory of graphic symbols, the visual elements of design, color theory, and typography.
- 2. Design functional graphic symbols and/or logos that are distinctive, memorable, appropriate, versatile, timeless, practical, simple in form and convey an intended message based on research.

- 3. Design functional graphic symbols and/or marks that are considerate of issues of size, reduction and reproduction.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 7. Design visually appealing symbols and logos that communicate a message clearly to intended audiences while effectively using vector software.

#### **ART 128 Interface Programming I (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in the Interface Design program.

Recommended Preparation: Successful completion or concurrent enrollment in ART 229. Comment: Letter grade and credit/no credit only. ART 128 may not be audited.

ART 128 Interface Programming I provides a foundation of front-end interface programming skills, techniques, and principles necessary to create visually effective, web-standard compliant web sites. This course introduces HTML (HyperText Markup Language), CSS (Cascading Style Sheets), and JavaScript to manually convert custom visual interface designs into fully functional, interactive web sites.

Upon successful completion of ART 128, the student should be able to:

- 1. Apply basic concepts and principles of the front-end interface programming technologies HTML, CSS, and JavaScript in the creation of web-standard compliant web sites.
- 2. Analyze and evaluate the source code of existing web sites for the use of well-formed, semantic markup, cross-platform/cross-browser compatibility, validation, and accessibility issues.
- 3. Apply knowledge of the theory, history, and principles of interface design in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by actively participating during group critiques.
- 6. Synthesize the concepts and principles of interface design with interface programming in the creation of web sites that integrates conceptual thinking, technical execution, and aesthetic application.

6 hours lecture/lab per week

Prerequisite(s): A grade of a grade of "C" or higher in ART 127; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade or Credit/No Credit only. ART 129 may not be audited.

ART 129 introduces the concept of creating conceptually and visually unified corporate identity collateral with effective branding and marketing guidelines through the development of print and web design.

Upon successful completion of ART 129, the student should be able to:

- 1. Develop strong visual concepts to communicate a brand based on needs and purpose by exploring effective corporate identity, branding and marketing guidelines.
- 2. Design collateral materials using structural grid systems, modules and design principles to organize visual information such as photo, illustration, typography and white space, using design software.
- 3. Apply knowledge of the theory, history, and principles of design and animation in the creation new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.
- 6. Produce a unified corporate identity brand through the design of printed and web collateral materials.

#### ART 156 Digital Painting (3)

6 hours lecture/lab per week

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

Comment: Letter grade and credit/no credit grading only. ART 156 may not be audited.

ART 156 explores the fundamental principles and techniques of digital painting. Students learn digital painting techniques as used for personal expression, production design, concept art, matte painting, and texture mapping.

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

- 1. Develop paintings employing the digital painting tools, thumbnails, and reference using introductory level technical skills and procedures.
- 2. Employ the vocabulary of traditional and digital painting to define creative objectives and evaluate outcomes.
- 3. Apply knowledge of contemporary industry standards in the development of digital painting.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.

- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.

#### ART 157 Film Analysis and Storytelling (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 126; and satisfactory completion of the Film Analysis and Storytelling entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program. Comment: Letter grade and credit/no credit only. ART 157 may not be audited.

ART 157 explores the fundamental principles and techniques of storytelling through storyboards, 2D animatics, 3D animatics, and character model sheets. Topics include: character design, storyboarding, camera angles and cuts, editing a story reel with audio, and pitching storyboards.

Upon successful completion of ART 157, the student should be able to:

- 1. Develop storyboards, 2D animatics, and 3D animatics using introductory level technical skills and procedures.
- 2. Employ the vocabulary of traditional and digital storytelling to define creative objectives and evaluate outcomes.
- 3. Apply knowledge of contemporary industry standards in the development of storyboards, 2D animatics and 3D animatics.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 7. Develop 3D content that integrates multiple stages of the CG pipeline, including: 3D modeling, lighting, audio, and rendering.

## ART 159 History of Communication Design (3) KCC AA/DA and KCC AS/AH 6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112 and a grade of "C" or higher in ART 115; and satisfactory completion of the History of Communication Design entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts program.

Comment: Letter grade and credit/no credit only. ART 159 may not be audited.

ART 159 is a chronological survey of design history with an emphasis on work from the Victorian Period through the present. International, political, social and technological

issues are addressed in relationship to visual arts and design disciplines. A studio component integrates research with design projects.

Upon successful completion of ART 159, the student should be able to:

- 1. Explore and identify the key periods of communication design.
- 2. Analyze historical and contemporary communication design styles.
- 3. Research a design period and present a visual solution based on that period.
- 4. Apply knowledge of the theory and history, and the elements and principles of design in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 7. Work effectively as a team member to achieve creative decisions.

#### ART 175 Survey of Global Art I (3) KCC AA/FGA and KCC AS/AH

*3 hours lecture per week* 

Recommended Preparation: ART 101.

ART 175 is an introduction the major developments in Global Art from prehistory to 1500.

Upon successful completion of ART 175, the student should be able to:

- 1. Distinguish how art expresses world views and reflects societies' organization and interaction with other cultures.
- 2. Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- 3. Describe how art reveals beliefs and practices of diverse communities.
- 4. Analyze a work of art through the recognition of the visual elements.

## ART 176 Survey of Global Art II (3) KCC AA/FGA and KCC AS/AH

*3 hours lecture per week* 

Recommended Preparation: Credit or concurrent enrollment in ART 101.

ART 176 will examine artistic production of major societies from 1500 to the present.

Upon successful completion of ART 175, the student should be able to:

- 1. Distinguish how art expresses world views and reflects societies' organization and interaction with other cultures.
- 2. Analyze art through religious, political, and economic factors that have shaped culture in different parts of the globe at different times.
- 3. Describe how art reveals beliefs and practices in diverse communities.
- 4. Analyze a work of art through the recognition of its visual elements.

#### ART 189 Introduction to Hawaiian Art (3) KCC AA/DA and KCC AS/AH

6 hours lecture/lab per week

Recommended Preparation: HAW 101.

ART 189 is an integrated beginning studio art course, which offers students the opportunity to understand and express Hawaiian cultural perspectives through contemporary visual art activities.

Upon successful completion of ART 189, the student should be able to:

- 1. Examine the historical and formal qualities of objects produced by Hawaiians through pre-contact, post-contact, and contemporary times.
- 2. Create art as a means of contemporary notation, conceptualization and visual organization.
- 3. Demonstrate how the Hawaiian language informs the process of art making and offers insights into the metaphorical nature intrinsic in Hawaiian art.
- 4. Experiment by taking risks through the creative problem solving process: from planning and discovery to implementation and evaluation.
- 5. Explain the scope of design in Hawaiian culture, its relationship to Western and Pacific Island design both in historic and contemporary times.

THE 200 LEVEL STUDIO COURSES in photography, drawing, figure drawing, painting, ceramics, visual studies and sculpture (ART 207, 212, 213, 214, 223, 243, 244, 253) are intended primarily for ART majors but are also open to other students. They build on skills and concepts learned in ART 101, 113, 114, 115 and 116.

### ART 202 Digital Imaging (3) KCC AA/DA

6 hours lecture/lab per week

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

Comment: Letter grade and Credit/No Credit only. ART 202 may not be audited.

ART 202 builds upon the foundation level technical and conceptual digital art skills introduced in ART 112 Introduction to Digital Arts. Through lessons, demonstrations, and hands-on-exercises, this course aims to develop intermediate skills in digital imaging concepts and techniques including image capture, manipulation, and output. Emphasis will be placed on the creative process and developing a conceptual and aesthetic criteria for evaluation.

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

- 1. Apply basic concepts and principles of digital imaging and manipulation in the creation of digital works of new media art.
- 2. Utilize industry standard digital imaging software techniques and technologies with digital camera equipment to capture, adjust, manipulate, and composite digital content and imagery in the creation of print and time-based works of new media art.
- 3. Apply knowledge of the theory, history, and principles of interface design in the creation new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by participating as an active critic during group critiques.
- 6. Synthesize the concepts and principles of digital imaging, digital photography, digital printing, and motion graphics in the creation of works of new media art that integrate conceptual thinking, technical execution, and aesthetic application.

## ART 207 Intermediate Photography: Techniques and Aesthetics of Photography (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 107 or consent of instructor.

Comment: Letter grade and credit/no credit only. ART 207 may not be audited. ART 207 is repeatable up to six credits. Students who repeat ART 207 will apply all ART 207 competencies toward constructing a semester long body of photographic work inclusive of field and subject research, experimentation, critical discussion and resolution. Course supplies will cost approximately \$150.00.

ART 207 focuses on black and white photography emphasizing communication and self-expression through lectures, demonstration and projects.

Upon successful completion of ART 207, the student should be able to:

- 1. Perform and apply beyond the basic photographic techniques with camera operations; black and white film processing; darkroom print enlargement and manipulation; and systems of exposure and development for film.
- 2. Show proficiency in skills and concepts relative to the practice of photography as a means of visual communication and self-expression.
- 3. Develop knowledge of the traditions and history of photography.
- 4. Show a developed proficiency in the creative problem-solving process; personal insight; craftsmanship; and technical, aesthetic and critical concepts.
- 5. Use and apply strong communication skills in critiques and discussions to effectively critique and analyze photographic imagery.

#### **ART 212 Digital Animation (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in the Animation program.

Comment: Letter grade and credit/no credit only. ART 212 may not be audited.

ART 212 explores the fundamental principles and techniques of 3D computer animation. Students learn to create convincing motion by creating several short animations that explore animation principles and character development.

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

- 1. Develop character behavior exercises employing the principles of animation, thumbnails, and storyboards using introductory level technical skills and procedures.
- 2. Employ the vocabulary of traditional and 3D computer animation to define creative objectives and evaluate outcomes.
- 3. Apply knowledge of contemporary industry standards in the development of 3D character animation workflow.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active participant during group critiques.
- 7. Develop a 3D character animation that integrates the mechanics and emotion of animation, lighting, and rendering.

## ART 213 Intermediate Drawing (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 113 or consent of instructor.

Recommended Preparation: Credit in or placement in ART 101 and ART 270.

Comment: Letter grade and credit/no credit only. ART 213 may not be audited. ART 213 is repeatable for a maximum of six credits. Course supplies for ART 213 will cost approximately \$75.00.

ART 213 is a continuation and development of drawing ideas and skills introduced in ART 113. A variety of materials, techniques, and concepts are explored, based on developments in modern and contemporary art practice.

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

- 1. Show a developed proficiency in the use of a variety of drawing materials, techniques and concepts developed in modern and contemporary art practice.
- 2. Develop skills in drawing as a descriptive language for greater personal expression.

3. Demonstrate an increased familiarity with the language of art, the basic vocabulary of drawing: line, shape, value, color, form and space; and to organize these elements and their relationships.

#### ART 214 Introduction to Life Drawing (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 113 with a "C" or higher **or** consent of instructor.

Recommended Preparation: Credit in or placement in ART 213

Comment: Letter grade and credit/no credit only. ART 214 may not be audited. ART 214 is repeatable for a maximum of six credits. Course supplies will cost approximately \$75.00.

ART 214 is an investigation of the figure concerning anatomical construction, light, space, diagrammatic analysis, and thematic content through the process of drawing.

Upon successful completion of ART 214, the student should be able to:

- 1. Draw the human figure accurately based on anatomical construction.
- 2. Apply the visual elements of line, shape, volume, mass, light and space, and the design elements of balance, rhythm, movement and dominance to the drawing process.
- 3. Develop proficiency in the use of a variety of drawing materials and techniques, including diagrammatic analysis.
- 4. Draw the human figure expressively.

#### ART 223 Intermediate Painting (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 123 or consent of instructor.

Recommended Preparation: Credit in or placement in ART 270.

Comment: Course supplies will cost approximately \$150.00. Letter grade and credit/no credit only. ART 223 may not be audited. ART 223 is repeatable for a maximum of six credits.

ART 223 is a survey of late 19th to early 21st-century studio painting practice emphasizing developments in spatial organization, abstraction, expression and conceptual development.

Upon successful completion of ART 223, the student should be able to:

- 1. Develop a working knowledge of late 19th to early 21st century studio painting practice emphasizing developments in spatial organization, abstraction, expression and conceptual development.
- 2. Demonstrate an understanding of all aspects of color mixing, including structuring a color palette through sensitively perceiving value, hue, and chroma.
- 3. Demonstrate an understanding of the abstraction process.

- 4. Exemplify trusting one's own decisions, insights and perceptions during the creative problem-solving process.
- 5. Begin the search for an original and personal direction in painting.

## ART 225 Painting/Water-Based Media (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 111 or ART 113 or consent of instructor.

ART 225 offers an introduction to water-based media. Traditional transparent color, gouache, and acrylic painting will be explored.

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

- 1. Distinguish and become familiar with the techniques associated with all three water-based techniques. In addition, apply color using different techniques, wet on wet, wet on dry, texture transfer and resist techniques.
- 2. Expand knowledge of water-based paint and color mixing. Explore color groupings (color analogy), colors in simultaneous contrast, and limited palettes.
- 3. Successfully complete a series of 6-8 finished paintings that are related thematically.
- 4. Demonstrate creative problem solving through the process of discovery and application of techniques taught.
- 5. Develop an attitude of risk-taking and be willing to accept failure in order to achieve success; learning from mistakes is part of the creative process.
- 6. Begin the search for an original and personal vision.

#### ART 226 3D Computer Graphics II (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 126 and a grade of "C" or higher in ART 202; and satisfactory completion of the 3D Computer Graphics II entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts program. Comment: Letter grade and credit/no credit only. ART 226 may not be audited.

ART 226 explores intermediate level conceptual and technical topics in 3D computer graphics, including: character design, character modeling, high-detail digital sculpting, character setup, surfacing, and animation.

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

- 1. Develop 3D models, animations, and related art assets using intermediate level technical skills, procedures, and production methodologies.
- 2. Employ appropriate strategies to develop 3D models suited to the needs of character setup and animation.
- 3. Apply knowledge of the theory, history, and principles of design and animation in the creation new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications,

- technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 6. Develop 3D content that integrates multiple stages of the computer graphics pipeline, including: 3D modeling, UV layout, high-detail sculpting, surfacing, character setup, animation, lighting, and rendering.

#### ART 229 Interface Design I (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 125; and satisfactory completion of the Interface Design I entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Recommended Preparation: Credit or concurrent enrollment in ART 128.

Comment: ART 229 may not be audited.

ART 229 Interface Design I provides a foundation of interface design skills, techniques, and principles necessary to design visually effective, user-friendly web sites. Through lessons, demonstrations, and hands-on projects, this course explores how the fundamental elements and principles of graphic design are applied through the design process for creating interactive interfaces. Students go through the analysis, information architecture, conceptual planning, and visual layout designing stages of the web design process and document their findings through client documentation and presentations.

Upon successful completion of ART 229, the student should be able to:

- 1. Apply basic concepts and principles of interface design, user experience design, and information architecture in the creation of client-based interactive applications and web sites.
- 2. Utilize industry standard graphics editing software to design the content structure, informational hierarchy, navigation, user workflow, and visual layout for interactive client-based interfaces.
- 3. Apply knowledge of the theory, history, and principles of interface design in the creation new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by participating as an active critic during group critiques.
- 6. Synthesize the concepts and principles of graphic design with interface and user experience design in the creation of interactive interfaces that integrate conceptual thinking, technical execution, and aesthetic application.

ART 243 Intermediate Ceramics: Hand Building (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 105 or consent of instructor.

Comment: ART 243 is repeatable once for a maximum of six credits. Course materials and supplies will cost approximately \$100.00.

ART 243 focuses on development of sculptural and vessel concepts using hand building techniques.

Upon successful completion of ART 243, the student should be able to:

- 1. Successfully apply the three basic hand-building techniques and the potential of each as structural and decorative elements.
- 2. Apply an awareness of the varieties of materials and techniques of the glazing and firing processes.
- 3. Use innovative and inventive problem solving, through creative decision-making and insightful articulation of finished ceramic vessels and sculptural forms.
- 4. Exhibit an ability to generate creative ideas through three-dimensional visualization techniques.
- 5. Apply color and color theory as it relates to three-dimensional form in the use of glazes and oxides.
- 6. Utilize drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.
- 7. Exhibit an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
- 8. Articulate the concepts and intent of a completed piece.

#### ART 244 Intermediate Ceramics: Wheel Throwing (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 105 or consent of instructor.

Comment: ART 244 is repeatable once for a maximum of six credits. Course materials and supplies will cost approximately \$100.00.

ART 244 focuses on development of vessel and sculptural concepts using wheel throwing techniques.

Upon successful completion of ART 244, the student should be able to:

- 1. Successfully apply through completed projects, a basic proficiency in wheel throwing techniques.
- 2. Employ the skillful use of clay bodies in oxidation and reduction firing.
- 3. Exhibit an awareness of the visual elements and the design principles while creating ceramic vessels and sculptural forms.
- 4. Use innovative and inventive problem-solving strategies through creative processes.
- 5. Exhibit an ability to generate creative ideas through three-dimensional visualization techniques.
- 6. Utilize drawing as a tool for conceptualization and documentation of personal imagery and technical investigation of the ceramic process.

- 7. Exhibit an ability to articulate insightfully, the concepts and intent of a finished ceramic object.
- 8. Apply an awareness of color and color theory as it relates to glazing.

# ART 245 Intermediate Life Drawing (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade "C" or higher in ART 113 or a grade of "C" or higher in ART 214 or consent of instructor.

Recommended Preparation: ART 270.

Comment: Letter grade and credit/no credit grading only. ART 245 may not be audited. Course supplies will cost approximately \$75.00. ART 245 is repeatable for a maximum of six credits.

ART 245 focuses on further investigations of the human figure that address anatomical and diagrammatic construction, light, space, and thematic content.

Upon successful completion of ART 245, the student should be able to:

- 1. Draw the human figure accurately with an improved level of performance in descriptive drawing.
- 2. Demonstrate a working knowledge of the skeletal and musculature systems of the human figure.
- 3. Demonstrate critical thinking in analyzing meaning and thematic content in the figurative tradition of drawings by past and modern masters.
- 4. Work with and think independently about utilization of the human figure in advanced level courses, including advanced life drawing and animation studies.

## **ART 246 3D Computer Graphics III (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 226; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit grading only. ART 246 may not be audited.

ART 246 explores advanced conceptual and technical topics in 3D computer graphics. Students will utilize a 3D animation and modeling software and related applications to design, model, surface, rig, animate, and render complex computer generated characters.

Upon successful completion of ART 246, the student should be able to:

- 1. Develop 3D models, character rigs, animations, and related art assets using advanced level technical skills, procedures, and production methodologies.
- 2. Employ appropriate modeling strategies to develop organic 3D character models.
- 3. Employ character setup tools to develop feature-rich character rigs suitable for animation.

- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.
- 7. Develop 3D content that reflects contemporary industry standards for 3D characters in filmic and non-filmic media.

# **ART 247 Lighting and Rendering (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 126; and approval of the Lighting and Rendering entrance portfolio review or acceptance into the Associate of Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit only. ART 247 may not be audited.

ART 247 explores concepts, tools, and techniques to create cinematic lighting, texturing, and rendering in computer generated imagery.

Upon successful completion of ART 247, the student should be able to:

- 1. Apply intermediate level and advanced concepts and principles of computer graphic lighting and camerawork in 3D environments.
- 2. Apply intermediate level and advanced concepts and principles of rendering in the creation of 3D artwork and/or animation.
- 3. Apply knowledge of the theory, history, and principles of lighting design in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical lighting and rendering production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 6. Synthesize the concepts and principles of 3D lighting, rendering, and camerawork in the creation of 3D art and animation that integrate conceptual thinking, technical execution, and aesthetic application.

# ART 249 Interface Design II (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 128 **and** a grade of "C" or higher in ART 229; **and** satisfactory completion of the Interface Design II entrance portfolio review **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade and credit/no credit grading only. ART 249 may not be audited.

ART 249 integrates the foundation level visual interface design skills introduced in ART 229 Interface Design I with the technical interface programming skills introduced in ART 128 Interface Programming I. Students go through the full creative design process for interaction design of analyzing, planning, designing, coding, testing, and launching a custom designed web standard compliant HTML/CSS static web site for a proposed client. Students document their findings through client documentation and defend their design decisions via presentations and critiques.

Upon successful completion of ART 249, the student should be able to:

- 1. Apply intermediate level and advanced concepts and principles of interface design and interface programming in the creation of client-based interactive applications.
- 2. Utilize industry standard graphics editing software and web standard compliant markup and styling to create visually effective interactive client-based interfaces.
- 3. Apply knowledge of the theory, history, and principles of interface design in the creation new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by participating as an active critic during group critiques.
- 6. Synthesize the concepts and principles of graphic design, interface design, and interface programming in the creation of interactive interfaces that integrate conceptual thinking, technical execution, and aesthetic application.

## ART 253 Figure Modeling (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): ART 116 or consent of instructor.

ART 253 focuses on modeling the human figure in clay, with emphasis on the basic skeletal structure and muscles in relation to surface modulation, proportion, volume and gesture.

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

- 1. Successfully use a variety of tools, processes, and techniques in the development of three-dimensional figure and portrait modeling, mold-making, fabrication, and the casting process and materials.
- 2. Successfully apply the visual elements of art and principles of design.
- 3. Complete the creative problem solving process from the preliminary planning stage and exploration through revisions to the final product.
- 4. Effectively write about and defend the conceptual merits of work produced for the course.
- 5. Apply an ability to articulate the concepts and intent of a finished sculpture.

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 226; and instructor approval or acceptance into the Associate in Science degree in New Media Arts program. Comment: Letter grade and credit/no credit only. ART 256 may not be audited.

ART 256 covers the theory and art of digitally combining 2D and 3D source images to produce an integrated result. Emphasis will also be placed on developing aesthetic criteria for evaluation purposes.

Upon successful completion of ART 256, the student should be able to:

- 1. Analyze both the technical and aesthetic issues of compositing.
- 2. Demonstrate the skills to create the digital composite and the artistic eye to critically evaluate the final composition.
- 3. Apply the concepts of digital compositing: image manipulation, color correction, tracking, compositing operators, channels, matter and matter extraction to work effectively with 2D, 3D and live action imagery.
- 4. Use the technical vocabulary of digital compositing as well as increased familiarity with the language of art to aid in the integration of the technological skill with an aesthetic criterion.
- 5. Demonstrate the skill to match color and lighting, to perceive camera angles and depth of field to match a backplate.
- 6. Use problem-solving strategies to complete the creative process from concept development through revisions to final output.
- 7. Demonstrate strong group communication skills and the ability to speak clearly during critique.

## ART 257 Motion Graphic Design (3) KCC AA/DA

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 112; and satisfactory completion of the Motion Graphic Design entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts program.

Comment: Letter grade and credit/no credit only. ART 257 may not be audited.

ART 257 Motion Graphic Design introduces the basic principles of animation and motion graphics through the creation of time-based works of art. Building upon a foundation of skills in digital art and graphic design, students go through the full creative process of planning, designing, and animating motion graphics that integrate image, text, and audio.

Upon successful completion of ART 257, the student should be able to:

- 1. Apply basic concepts and principles of graphic design, computer animation, and narrative storytelling in the creation of time-based works of motion graphics.
- 2. Utilize industry standard technologies and techniques to animate the basic elements of motion graphic design including image, typography, and sound to deliver time-based media content for the web, tv, and film.
- 3. Apply knowledge of the theory, history, and principles of interface design in the

- creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by participating as an active critic during group critiques.
- 6. Synthesize the principles of motion graphic design using the individual elements of image, text, and sound in the creation of time-based digital works of art that communicate conceptual ideas, technical execution, and aesthetic application.

# **ART 258 Interface Programming II (3) KCC AA/DA**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 128; and satisfactory completion of the Interface Programming II entrance portfolio review or acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program. Comment: Letter grade and credit/no credit grading only. ART 258 may not be audited.

ART 258 Interface Programming II builds upon the foundation level HTML, CSS, and Javascript concepts introduced in ART 128 Interface Programming I. Through lessons, demonstrations, and hands-on-exercise, this course aims to develop intermediate skills in contemporary interface programming practices. Weekly topics will address emerging and popular interface programming techniques and technologies.

Upon successful completion of ART 258, the student should be able to:

- 1. Apply intermediate level and advanced concepts and principles of interface programming in the creation of interactive interfaces and applications.
- 2. Utilize emerging and contemporary markup, styling, and scripting technologies to create effective interactive client-based interfaces.
- 3. Apply knowledge of the theory, history, and principles of interface design in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by participating as an active critic during group critiques.
- 6. Synthesize the concepts and principles of interface programming with emergent technologies in the creation of interactive interfaces that integrate conceptual thinking, technical execution, and aesthetic application.

# ART 260 Exhibition Design and Management (3) KCC AA/DA

6 hours lecture/lab per week

ART 260 utilizes the structure of Koa Gallery on campus to explore, develop, and apply exhibition-making techniques. Departing from historical precedents and contemporary

considerations, ART 260 offers intensive hands-on experience across the various stages of exhibit design and management from research and planning to implementation and reception.

Upon successful completion of ART 260, the student should be able to:

- 1. Explore and apply techniques of design and management across various stages of exhibition development from research and planning to implementation and reception.
- 2. Experiment by taking risks throughout creative problem-solving processes.
- 3. Prepare announcement cards, press releases, and exhibition texts for a general and specialized audience as a means of practicing written communication skills.
- 4. Generate visual documentation of a Koa Gallery exhibition for inclusion in the organization's official records.
- 5. Develop knowledge of the traditions and histories of exhibition-making in Hawai'i.

## ART 269 (Alpha) Study Abroad (1-3)

30 hours lecture/lab per credit

Recommended Preparation: ART 113 or ART 270.

Comment: ART 269 (alpha) is offered in the summer semester only.

ART 269 (Alpha) is an on-site study of the art/architecture of a designated location(s), using lectures and discussions and/or an art studio medium as a tool to analyze, understand and appreciate the development of this region's art/architecture.

Upon successful completion of ART 269, the student should be able to:

- 1. Contrast and compare, through writing and a studio art medium, the peoples and culture of the designated location(s) visited.
- 2. Analyze, define and compare the development of the art and/or architecture of the designated location(s) visited.
- 3. Use group discussions, essays and examinations, and /or a visual studio process as a tool to analyze, and app raise the form and structure of the art/architecture studied.

# ART 269C Study Abroad: Art (3) KCC AA/DA Summer

13.5 hours lecture/lab per week for 6 weeks

*Prerequisite(s): Consent of instructor.* 

Recommended Preparation: ART 113 or ART 270.

Comment: ART 269C is offered in the summer semester only.

ART 269C is an on-site study of the art/architecture of Hawaii using lectures and discussions and/or an art studio medium as a tool to analyze, understand and appreciate the development of this region's art/architecture. This course provides a rare opportunity to study art (historical and contemporary) through visiting art museums and private art

collections located in the state of Hawaii. Accompanied by an instructor, participants experience a blend of scholarship, history and culture of Hawaii, an important region in terms of art and architectural history, through first-hand experience of the arts and fellowship. The course includes instructional meetings before and after a series of field trips, slide lectures and group discussions. Keeping sketch journals, field trips log, and essays as well as on-site group discussions are required for the grade.

Upon successful completion of ART 269C, the student should be able to:

- 1. Contrast and compare, through writing and a studio art medium, the peoples and culture of the designated location(s) visited.
- 2. Analyze, define and compare the development of the art and/or architecture of the designated location(s) visited.
- 3. Use group discussions, essays and examinations, and/or a visual studio process as a tool to analyze, and appraise the form and structure of the art/architecture studied.

## ART 269G Study Abroad (3) KCC AA/DA Summer

30 hours lecture/lab per credit

Prerequisite(s): Appropriate introductory studio art course **or** appropriate art history course **or** consent of instructor.

Recommended Preparation: ART 113 or ART 270.

Comment: ART 269G is offered in the summer semester only.

ART 269G is an on-site study of the art/architecture of Chicago, using lectures and discussions and/or an art studio medium as a tool to analyze, understand and appreciate the development of this region's art/architecture.

Upon successful completion of ART 269G, the student should be able to:

- 1. Contrast and compare, through writing and a studio art medium, the peoples and culture of the designated location(s) visited.
- 2. Analyze, define and compare the development of the art and/or architecture of the designated location(s) visited.
- 3. Use group discussions, essays and examinations, and /or a visual studio process as a tool to analyze, and appraise the form and structure of the art/architecture studied.

#### ART 269H Art and Architecture of Hawaii (3)

30 hours lecture/lab per credit

Recommended Preparation: ART 113 or ART 270.

Comment: ART 269H is offered in the summer semester only.

ART 269H is an on-site study of the art/architecture of Hawaii, using lectures, discussions and art studio mediums as a tool to analyze, understand and appreciate the development of this region's art/architecture.

Upon successful completion of ART 269H, the student should be able to:

- 1. Contrast and compare, through writing and a studio art medium, the peoples and culture of the designated location(s) visited.
- 2. Analyze, define, and compare the development of the art and/or architecture of the designated location(s) visited.
- 3. Use group discussions, essays, and examinations, and/or visual art studio process as a tool to analyze and appraise the form and structure of the art/architecture studied.
- 4. Identify and describe existing artifacts or structures that represent the traditional values on resource management systems in Hawaii.

## ART 270 Introduction to Western Art (3) KCC AA/DH

*3 hours lecture per week* 

Recommended Preparation: ART 101 or HIST 151.

ART 270 focuses on major developments in Western art from prehistory to present.

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

- 1. Investigate and evaluate the concept that art is a visible manifestation of cultural values- a mirror of "reality" of its time period.
- 2. Show a knowledge of major historical and cultural trends of Western art, including knowledge of various materials, techniques, and art forms.
- 3. Examine and evaluate the present by comparing and contrasting it with the past.
- 4. Analyze style both descriptively and comparatively.
- 5. Demonstrate a knowledge of the diffusion of trends and styles from one country to another over space and time.
- 6. Incorporate writing as a tool for analyzing art forms.

#### ART 280 Introduction to Eastern Art (3) KCC AA/DH

*3 hours lecture per week* 

Recommended Preparation: ART 101 or HIST 151.

ART 280 focuses on major developments in arts of Asia.

Upon successful completion of ART 280, the student should be able to:

- 1. Apply an awareness that art is a visible manifestation of cultural values and as a "child of its time."
- 2. Show a knowledge of major historical and cultural trends of Eastern art, including knowledge of various materials, techniques, and art forms.
- 3. Apply an awareness of the present by comparing and contrasting it with the past.
- 4. Apply a knowledge of the diffusion of trends and styles from one country to another over space and time.
- 5. Analyze style both descriptively and comparatively.

6. Incorporate writing as a tool for analyzing art forms.

# ART 284 Animation Studio (6) KCC AA/DA

12 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 126 and a grade of "C" or higher in ART 212; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit only. ART 284 may not be audited.

ART 284 explores contemporary topics in animation and new media art in an advanced studio environment. Through the creation of large-scale projects, students will explore targeted areas of the CG pipeline, developing work that synthesizes animation principles, topics, skills, and techniques.

Upon successful completion of ART 284, the student should be able to:

- 1. Through the creation of a large scale new media art project, apply advanced concepts and principles of 2D and/or 3D computer graphics technologies.
- 2. Develop project concepts, plan production schedules, conduct research, and execute all iterative steps to meet project milestones and achieve creative objectives.
- 3. Apply theoretical and historically relevant principles of animation in the creation of new media art.
- 4. Apply successful problem-solving skills and make informed decisions while utilizing industry standard applications, technologies, and techniques throughout the full creative process and CG pipeline.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.
- 6. Synthesize the concepts, principles, skills, and techniques of 3D computer graphics and animation in the creation of a large-scale project that integrates multiple stages of the CG pipeline along with conceptual thinking, technical execution, and aesthetic application.

# ART 285 Interface Design Studio (6) KCC AA/DA

12 hours lecture/lab per week

Prerequisite(s): ART 128 with a grade of "C" or higher **and** ART 229 with a grade of "C" or higher; **and** instructor approval **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program. Comment: Letter grade only. ART 285 may not be audited.

ART 285 explores contemporary topics in interface design and new media art in an advanced studio environment. Through the creation of large-scale projects, students explore in depth the full design process of researching, planning, designing, producing, and displaying work that synthesizes interface design principles, topics, skills, and techniques.

Upon successful completion of ART 285, the student should be able to:

- 1. Through the creation of a large scale new media art project, apply advanced concepts and principles of graphic design and interface design technologies.
- 2. Develop conceptual project ideas, plan a full production schedule, and execute all iterative steps and phases of the full design process by meeting project milestones and deadlines.
- 3. Apply theoretical and historically relevant principles of graphic design and interface design in the creation of new media art.
- 4. Apply successful problem-solving skills and make informed design decisions while utilizing industry standard applications, technologies, and techniques throughout the full creative and technical design process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by participating as an active critic during group critiques.
- 6. Synthesize the concepts, principles, skills, and techniques of interface design in the creation of a large-scale project that integrates conceptual thinking, technical execution, and aesthetic application.

## ART 290 The Arts of Africa, Native Americas, and the Pacific (3) KCC AA/DH

3 hours lecture per week

Recommended Preparation: ART 101 or HIST 151.

ART 290 focuses on formal and contextual study of art from selected areas in Africa, the Pacific and Native Americas.

Upon successful completion of ART 290, the students should be able to:

- 1. Apply an awareness of art as a visible manifestation of cultural values and cultural identities. Be better able to define one's own cultural identity.
- 2. Show a knowledge of cultural trends in art making to include the application of various materials, techniques and art forms.
- 3. Show an awareness of the basic overlapping themes as to why tribal societies produce art to include creation, myth and genealogy, the importance of gender, ancestors, status and display, the roles of fertility, shamans and funerals.
- 4. Apply a knowledge of the present day role of art by comparing or contrasting its function in the past.
- 5. Show an awareness of the interactive roles that society, religion, politics and urbanization have played in the art making process.
- 6. Critically examine the impact of western contact, colonization, decolonization and a global economy on the visual arts.
- 7. Apply critical thinking and inquiry skills to the analysis and processing of information.
- 8. Incorporate writing as a tool for analyzing art forms.

## ART 293 Internship (3)

A total of 6 hours seminar, 150 hours field experience

Prerequisite(s): Instructor approval **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: ART 293 may not be audited. Letter grade and credit/no credit grading only. ART 293 is repeatable for maximum of six credits.

ART 293 provides supervised work experience in multimedia production with mentorship by a professional in the field. This course enables students to apply the knowledge and skills acquired in the classroom to the work environment.

Upon successful completion of ART 293, the student should be able to:

- 1. Develop skills and support materials for procurement of an internship in the field of New Media.
- 2. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 3. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 4. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by actively participating during group critiques.
- 5. Supervised and/or mentored field experience in multimedia production.

# **ART 294 Practicum in Digital Arts (3)**

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 157 **and** a grade of "C" or higher in ART 212 **and** a grade of "C" or higher in ART 226; **and** instructor approval **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit only. ART 294 may not be audited. ART 294 is repeatable for maximum of six credits.

ART 294 provides an on-campus environment where advanced students in the New Media Arts program can engage in real production activity. Students will gain experience in a supervised on-campus work environment by producing work including but not limited to 2D and 3D animation, motion graphic projects, student publications, works for hire for non-profit or profit organizations, and works for hire for the community college system. ART 294 will operate in a manner similar to business and industry and students will be expected to work in teams carrying out all necessary production tasks within real production deadlines.

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

- 1. Develop an understanding of the basic principles of task organization and time management as they apply to the multimedia production.
- 2. Develop skills and support materials for procurement of employment or college transfer in the field of New Media.

- 3. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and actively participating during group critiques.
- 6. Work effectively as a team member to design and produce a short animation.

## ART 295 Design Portfolio (3)

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 249 **and** a grade of "C" or higher in ART 258; **and** instructor approval **or** acceptance into the Associate in Science degree in New Media Arts with a specialization in Interface Design program.

Comment: Letter grade or credit/no credit only. ART 295 may not be audited.

ART 295 guides students through the process of editing, compiling, and devising a strategy to focus their work to best market their skills in an interactive digital portfolio, hard copy portfolio, and application materials through a unified presentation. Industry and transfer issues will be covered to better prepare students for future career goals.

Upon successful completion of ART 295, the student should be able to:

- 1. Edit, compile and devise a strategy to focus and market multi-media work in a unified presentation.
- 2. Develop skills and support materials for procurement of employment or college transfer in the field of New Media.
- 3. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 4. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 5. Communicate effectively, both visually and verbally, by presenting work, defending design decisions, and by actively participating during group critiques.
- 6. Design an interactive digital portfolio and hard copy portfolio of personal multimedia work.

## ART 296 Demo Reel Development (3)

6 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in ART 246; and instructor approval or acceptance into the Associate in Science degree in New Media Arts with a specialization in Animation program.

Comment: Letter grade and credit/no credit only. ART 296 may not be audited.

ART 296 guides students through the process of compiling a demo reel that is representative of student interest and skill for entry into industry, professional schools, or

baccalaureate programs. Students will devise a strategy to edit, package, and market their work including a DVD, website, resume and related promotional materials.

Upon successful completion of ART 296, the student should be able to:

- 1. Organize art and animation into a portfolio that reflects clear aesthetic considerations and an awareness of industry standards.
- 2. Identify appropriate entry level positions and describe relevant educational, professional, and technical requirements.
- 3. Write well-structured supporting materials including a resume and cover letter.
- 4. Apply knowledge of the theory, history, and principles of design and animation in the creation of new media art.
- 5. Apply successful problem-solving skills utilizing industry standard applications, technologies, and techniques in the creative and technical production process.
- 6. Communicate effectively, both visually and verbally, by presenting work, defending design decisions and by actively participating during group critiques.

#### **ASIAN STUDIES**

## ASAN 100 Asian Perspectives (3) KCC AA/DS and KCC AS/SS

*3 hours lecture per week* 

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

ASAN 100 examines the history and cultures of Asia. Students will explore systems of values and their expression, history, social and political institutions, current issues of South, Southeast, and East Asia. This course will focus on change and continuity within the various regions of Asia, and this vast region's interrelationship with the rest of the world.

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

- 1. Express in writing or speaking, components of traditional and contemporary Asian political, social, economic and cultural patterns and institutions.
- 2. Discuss the geography of Asia and interrelationships with the rest of the world.
- 3. Analyze and describe contemporary issues and perspectives of Asia.
- 4. List and describe Asian cultural traditions, lifestyles, aesthetic expressions and their contemporary relevance.
- 5. Contrast and compare current trends of change in Asia and their relevance for the region and the world in the 21st century.

# ASAN 201 Introduction to Asian Studies: East Asia (3) KCC AA/DH and KCC AS/AH

*3 hours lecture per week* 

Prerequisite(s): Qualification for ENG 100 and qualification for MATH 82.

ASAN 201 covers a broad range of disciplines in examining the parts of Asia currently known as China, Japan, Korea (including North and South), and Taiwan. Lectures and reading combine approaches from the fields of anthropology, sociology, history, literature and the arts, religion, politics and economics. The goal of the course is to provide students with a broad historical knowledge of elements of humanities and social sciences in this region of the world, and to provide a basis for further study in more advanced and specialized classes.

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

- 1. Compare, contrast, and describe the ethnic groups of East Asia with other areas of the world.
- 2. Compare cultural, economic and political differences in the development of contemporary East Asia.
- 3. Explain the ways in which global forces have interacted with regional issues in East Asia.
- 4. Distinguish traditional and contemporary East Asian political, social, economic, and cultural patterns and institutions.
- 5. Identify the geography of East Asia and the interrelationship with the rest of the globe.
- 6. Analyze contemporary issues and perspectives of East Asian peoples reflected in the mass media and other sources.
- 7. Define East Asian cultural traditions, lifestyles, and aesthetic expressions, and their contemporary relevance.

# ASAN 202 Introduction to Asian Studies: South/Southeast Asia (3) KCC AA/DH and KCC AS/AH

3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 and qualification for MATH 82.

ASAN 202 examines the interrelationship of policies, economy, literature, religion, the arts, and history as the basis for understanding South and Southeast Asia through multidisciplinary approaches in the humanities and social sciences. Lectures and reading combine perspectives from the fields of anthropology, sociology, history, literature, the arts, religion, politics and economics. The goal of the course is to provide students with historical and cultural knowledge of the countries of South and Southeast Asia and to provide a solid foundation for further study.

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

- 1. Explain how environment and global forces have interacted with regional issues in South and Southeast Asia.
- 2. Describe and make informed comparisons about cultural, economic and political differences in the development of contemporary South and Southeast Asia.

- 3. Distinguish traditional and contemporary South and Southeast Asian political, social, economic, and cultural patterns and institutions.
- 4. Identify the geography of South and Southeast Asia and the interrelationship with the rest of the globe.
- 5. Analyze contemporary issues and perspectives of South and Southeast Asian peoples reflected in the mass media and other sources.
- 6. Define South and Southeast Asian ethnic groups, cultural traditions, lifestyles, and aesthetic expressions, and their contemporary relevance.

#### ASTRONOMY

## ASTR 110 Survey of Astronomy (3) KCC AA/DP

*3 hours lecture per week* 

*Prerequisite(s): A grade of "C" or higher in MATH 82.* 

Recommended Preparation: PHYS 100 or a high school level physics course.

ASTR 110 is a survey of astronomy and astronomical measurement techniques with emphasis on the structure, evolution and dynamics of the physical universe.

Upon successful completion of ASTR 110, the student should be able to:

- 1. Explain how scientists use both qualitative and quantitative analysis methods to investigate how planets, stars, galaxies, and the universe as a whole works.
- 2. Identify the instruments and methods astronomers use to investigate the physical universe.
- 3. List the current theories of the origin of life and the evolution of the planets, stars, galaxies, various forms of matter, and the physical universe.

#### **BIOCHEMISTRY**

## BIOC 141 Fundamentals of Biochemistry (3) KCC AA/DP

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in MATH 82 or a grade of "C" or higher in a higher-level mathematics course or one year of a high school level algebra course. Recommended Preparation: Two years of a high school level algebra course or MATH 103 or a higher-level mathematics course.

BIOC 141 focuses on the fundamentals of general, inorganic, and bioorganic chemistry as they apply to living systems.

Upon successful completion of BIOC 141, the student should be able to:

- 1. Use the metric system and scientific notation.
- 2. Explain modern theories of atomic structure and radioactivity.
- 3. Explain the periodic table and how it is used to predict chemical reactivity.
- 4. Explain chemical bonding.
- 5. Write chemical formulas and names.
- 6. Use kinetic molecular theory to explain chemical phenomena.
- 7. Perform calculations using the mole concept.
- 8. Write and balance chemical equations.
- 9. Perform calculations in stoichiometry.
- 10. Explain the concept of equilibrium.
- 11. Explain acid-base theory and pH.
- 12. Explain solution chemistry and the behavior of dissolved substances.
- 13. Name the basic types of organic molecules.
- 14. Explain the physical and chemical properties of hydrocarbons.
- 15. Explain the physical and chemical properties of the major organic functional groups.

# BIOC 244 Essentials of Biochemistry (3) KCC AA/DP Spring

*3 hours lecture per week* 

Prerequisite(s): BIOC 141 or CHEM 100 or CHEM 161 or successful completion of a college level general chemistry course.

Recommended Preparation: BIOL 101 or a higher-level biology course; and qualification for ENG 100.

Comment: BIOC 244 is offered in the Spring semester only.

BIOC 244 focuses on the chemical principles and concepts of living systems, with emphasis on the composition, function, and transformation of biological substances in animals, plants, and microorganisms. Sufficient organic chemistry is provided for understanding of these principles.

Upon successful completion of BIOC 244, the student should be able to:

- 1. Use bonding theory to predict Lewis structures for inorganic and organic molecules, then use Lewis structures to predict chemical and physical properties.
- 2. Use International Union of Pure and Applied Chemistry (IUPAC) nomenclature to name organic molecules with a single functional group.
- 3. Draw the Lewis structure for organic molecules and for the basic biomolecules including both structural isomers and optical isomers.
- 4. Describe the basic chemical reactions for all of the basic functional groups in organic and biomolecules.
- 5. Apply knowledge of organic functional groups to lipids, carbohydrates, proteins, nucleic acids, and messenger molecules to predict their biochemical properties.
- 6. Describe the biological function of biomolecules in cells and in tissues and organs.

- 7. Describe the structure and function of nucleic acids in cellular processes such as protein synthesis and both asexual cell division and sexual reproduction.
- 8. Describe the basics of DNA sequencing, bioengineering, and gene manipulation, and explain how DNA sequencing of genes can be used to understand and cure diseases as well as understand and study evolution.
- 9. Describe how enzymes are arranged into systems known as metabolic pathways, and how control over regulatory enzymes turns metabolic pathways on and off.
- 10. Describe the purpose of basic metabolic pathways, both catabolic and anabolic, and how these pathways interact to meet the purposes of an organism.
- 11. Give examples of how messenger molecules can alter the metabolism of cells, tissues, and organs.
- 12. Explain the cause of some metabolic diseases, and describe the clinical symptoms associated with these diseases.

#### **BIOLOGY**

## BIOL 101 Biology and Society (3) KCC AA/DB and KCC AS/NS

3 hours lecture per week

Recommended Preparation: ENG 100, ESL 100 or a higher-level English course; and CHEM 100 or a higher-level chemistry course.

BIOL 101 introduces students to the process of science through the biological sciences including the historical development of scientific concepts and the interaction of society with science. BIOL 101 is primarily designed to serve non-science majors and presents a broad survey of biology with special emphasis on its relevance in our everyday lives.

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

- 1. Connect the common themes and patterns that unite all life, including demonstrating how evolution is the foundation of modern biology.
- 2. Integrate the biotic and abiotic world with an understanding of earth's energy flow and identify challenges and solutions to global ecological issues.
- 3. Employ the scientific process and apply a scientific framework to decision-making regarding issues past, present and future.
- 4. Communicate why Hawai'i is a unique place on earth and propose scientifically based mediations to biological problems.

## BIOL 101L Biology and Society Laboratory (1) KCC AA/DY

3 hours lab per week

*Prerequisite(s): Credit or concurrent enrollment in BIOL 101.* 

Recommended Preparation: CHEM 100 or a higher-level chemistry course.

Comment: Letter grade only. BIOL 101L may not be taken credit/no credit. BIOL 101L may not be audited.

BIOL 101L is a laboratory to accompany BIOL 101 Biology and Society. The course includes laboratory and computer exercises, field trips and research projects to explore questions in biology.

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

- 1. Apply scientific methods and research procedures to investigate questions related to biology.
- 2. Employ proper techniques and procedures for biological investigations such as: microscopy, magnification, population sampling, scientific illustration, dissection, data collection and data analysis.
- 3. Research, evaluate and present scientific information as relevant to issues in biology and society.

## BIOL 124 Environment and Ecology (3) KCC AA/DB and KCC AS/NS

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ENG 22 or qualification for ENG 100 or qualification for ESL 100.

BIOL 124 examines the relationship between living things, including humans, and their environment. The course introduces major concepts of ecology and relates these concepts to environmental issues. Topics include the structure and function of ecosystems, evolutionary processes, population biology, extinction, sustainability and global climate change. Emphasis is placed on Hawaiian environment and ecology and the diversity of native Hawaiian species.

Upon successful completion of BIOL 124, the student should be able to:

- 1. Describe the biological and physical principles of ecology including ecosystem energetics, species relationships, and population growth.
- 2. Identify current ecological and environmental issues and threats to human societies.
- 3. Identify Hawai'i's major ecosystems and list factors that threaten the long-term persistence of those ecosystems and compare Hawai'i's ecology and environment, including evolutionary history, to other areas around the world.
- 4. Research, evaluate and present scientific information as relevant to ecological and environmental issues.
- 5. Apply ecological principles to problem-solving approaches to current human environmental issues, including sustainability in human societies.

## BIOL 124L Environment and Ecology Lab (1) KCC AA/DY

3 hours lab per week

Prerequisite(s): Credit or concurrent enrollment in BIOL 124.

Recommended Preparation: Credit in or concurrent enrollment in or qualification for MATH 100.

Comment: Letter grade only. BIOL 124L may not be audited. BIOL 124L may not be taken credit/no credit.

BIOL 124L is a laboratory to accompany BIOL 124 Environment and Ecology. The course includes laboratory and computer exercises, field trips and research projects to examine the relationship between living things, including humans, and their environment. Emphasis is placed on Hawaiian environment and ecology and the diversity of native Hawaiian species.

Upon successful completion of BIOL 124L, the student should be able to:

- 1. Describe the applications of the scientific method to ecological questions and everyday life.
- 2. Demonstrate critical thinking and logical reasoning through the use of scientific methods and research procedures to investigate questions related to ecology and environmental issues.
- 3. Apply scientific concepts to environmental issues including population growth, global climate change and introduced species.
- 4. Research, evaluate and present scientific information as relevant to ecological and environmental issues.

## BIOL 130 Anatomy and Physiology (4) KCC AA/DB and KCC AS/NS

4 hours lecture per week

Recommended Preparation: CHEM 100 or a higher-level biochemistry course; and a college level biology course or a college level zoology course.

BIOL 130 focuses on the structure and function of the human body, which includes a study of its gross anatomy, microanatomy, physiology, and pathology. Topics covered include cell biology, histology, and the following organ systems: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive.

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

- 1. Identify and discriminate anatomical structures at the level of the cell, tissue, organ, and system.
- 2. Distinguish the features, order, and significance of physiological processes and how they relate to anatomical structure.

# BIOL 130L Anatomy and Physiology Lab (1) KCC AA/DY

3 hours lab per week

Recommended Preparation: Credit or concurrent enrollment in BIOL 130.

BIOL 130L focuses on the structure of the human body, which includes a study of its gross anatomy and microanatomy. Topics covered include histology and the following organ systems: integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive.

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

1. Identify and discriminate anatomical structures at the level of the cell, tissue, organ, and system.

### BIOL 171 Introduction to Biology I (3) KCC AA/DB and KCC AS/NS

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher or concurrent enrollment in CHEM 161. Recommended Preparation: BIOC 141 or BIOL 101 or BIOL 124 or BOT 101 or CHEM 100 or ZOOL 200. It is strongly recommended to take BIOL 171L concurrently with BIOL 171.

BIOL 171 is the first semester of an introductory biology course appropriate for all life science majors. Topics covered include: cell structure, chemistry, growth and reproduction; DNA replication, transcription and translation; gene regulation, genetics, evolution, viruses, and bacteria.

Upon successful completion of BIOL 171, the student should be able to:

- 1. Describe the fundamental biology of the cell, including cell anatomy, biochemical composition, cellular metabolism, respiration and photosynthesis, communication, growth and reproduction.
- 2. Describe the fundamentals of Mendelian genetics, the chromosomal and molecular basis of heredity and apply these concepts to the mechanisms of evolution.
- 3. Describe the process of DNA replication and DNA transcription and translation from gene to protein, including gene regulation and apply these processes to the reproduction and metabolism of the cell.
- 4. Describe the principles of evolution through natural selection, the principles of descent with modification, the mechanisms involved in the evolution of populations and the origin of species.
- 5. Describe the history of life on Earth and the evolutionary relatedness of life on Earth through morphological and molecular phylogenies.
- 6. Describe the fundamental structure and function of viruses and bacteria.

# BIOL 171L Introduction to Biology I Lab (1) KCC AA/DY

3 hours lab per week

Prerequisite(s): Credit or concurrent enrollment in BIOL 171.

Comment: Letter grade and credit/no credit only. BIOL 171L may not be audited.

BIOL 171L accompanies the BIOL 171 lecture course. Topics covered include: scientific

method, biological molecules, enzyme kinetics, proper technique of compound and stereo microscopes, respirometry, photosynthesis, cultivation of bacteria, molecular biology, meiosis and mitosis in plant and animal cells, principles of Mendelian genetics, population genetics, evolution.

Upon successful completion of BIOL 171L, the student should be able to:

- 1. Demonstrate proper use of common lab equipment such as compound and stereo microscopes, respirometer, micropipettors, centrifuges, laboratory glassware, spectrophotometer.
- 2. Apply the scientific method to design and conduct experiments, generate, test and analyze hypotheses, and construct formal lab reports.
- 3. Properly construct and interpret data tables, graphs and scientific illustrations.
- 4. Demonstrate proper laboratory safety procedures and execute proper lab protocol.

## BIOL 172 Introduction to Biology II (3) KCC AA/DB

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in BIOL 171 or consent of instructor.

BIOL 172 is the second semester of an introductory biology course appropriate for all life science majors. Topics covered include: Anatomy and physiology of plants and animals, systematics of plants and animals, ecology of populations and communities, and ecosystem function.

Upon successful completion of BIOL 172, the student should be able to:

- 1. Describe the fundamental anatomy and physiology of protists, fungi and plants.
- 2. Describe the fundamental anatomy and physiology of animals.
- 3. Describe the relationship between animal form and function in terms of evolutionary history.
- 4. Describe the relationship between plant form and function in terms of evolutionary history.
- 5. Describe ecology, population biology, community ecology, and ecosystems ecology.

## BIOL 172L Introduction to Biology II Lab (1) KCC AA/DY

3 hours lab per week

Prerequisite(s): Credit or concurrent enrollment in BIOL 172.

Comment: Letter grade and credit/no credit only. BIOL 172L may not be audited.

BIOL 172L accompanies the BIOL 172 lecture course. Topics covered include: Protist and Fungus form and function; plant anatomy, reproduction and form and function; diversity of animal form and function and vertebrate anatomy, and ecology.

Upon successful completion of BIOL 172L, the student should be able to:

1. Demonstrate proper use of common lab equipment such as compound and stereo

- microscopes, and dissection techniques.
- 2. Apply the scientific method to design and conduct experiments, generate, test and analyze hypotheses, and construct formal lab reports.
- 3. Properly construct and interpret data tables, graphs and scientific illustrations.
- 4. Demonstrate proper laboratory safety procedures and execute proper lab protocol.
- 5. Demonstrate proper use of field equipment and sampling methods including transect tapes, quadrats, water quality and environmental monitoring devices, and other field gear.

## BIOL 265 Ecology and Evolutionary Biology (3) KCC AA/DB

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in BIOL 171; and a grade of "C" or higher in BIOL 172 or a grade of "C" or higher in BOT 101.

Comment: BIOL 265 may not be audited.

BIOL 265 Ecology and Evolutionary Biology will cover principles of ecology and evolution for life science majors stressing an integrated approach and recent advance. Emphasis is placed on Hawaiian ecology and evolutionary biology.

Upon successful completion of BIOL 265 the student should be able to:

- 1. Summarize the major principles of ecology and evolutionary biology and be able to integrate the two fields using examples.
- 2. Describe the ecological relationships among organisms and their environment.
- 3. Discuss the evolutionary relationships among organisms, the evolution of biodiversity and how evolution is the foundation of modern biology.
- 4. Demonstrate the ability to interpret biological data and discuss published research relevant to ecology and evolutionary biology.
- 5. Explain and give examples of Hawai'i's unique evolutionary history and ecology and discuss how they inform current conservation issues in Hawai'i, including the impacts of habitat modification and introduced species.

## BIOL 265L Ecology and Evolutionary Biology Lab (1) KCC AA/DY

3 hours lab per week

Prerequisite(s): A grade of "C" or higher in BIOL 171L; and a grade of "C" or higher in BIOL 172L or a grade of "C" or higher in BOT 101L; and concurrent enrollment in BIOL 265 or consent of instructor.

Comment: Letter grade only. BIOL 265L may not be audited. BIOL 265L may not be taken credit/no credit.

BIOL 265L is a laboratory that accompanies BIOL 265 and emphasizes investigation in Ecology and Evolutionary Biology.

Upon successful completion of BIOL 265L, the student should be able to:

1. Demonstrate the correct and safe use of standard field and laboratory techniques

- and equipment used in ecology and/or evolutionary biology.
- 2. Complete a scientific literature search and critique the value of printed and online references.
- 3. Design and carry out experiments that test hypotheses about ecological and evolutionary questions.
- 4. Demonstrate the ability to record observations, make interpretations, synthesize results and effectively communicate findings.
- 5. Explain and give examples of Hawai'i's unique evolutionary history and ecology.

## BIOL 275 Cell and Molecular Biology (3) KCC AA/DB

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in BIOL 171 and a grade of "C" or higher in BIOL 171L and a grade of "C" or higher in CHEM 272 and a grade of "C" or higher in CHEM 272L; or consent of instructor

Recommended Preparation: Concurrent enrollment in BIOL 275L.

BIOL 275 is a course in cell and molecular biology for life science majors. This course is designed to give the student a fundamental understanding of the structure and biochemistry of eucaryotic and procaryotic cells. The course also covers the basic principles of molecular biology and includes modern advances in biotechnology, recombinant DNA technology and bioinformatics.

Upon successful completion of BIOL 275, the student should be able to:

- 1. Describe, in detail, the organization of life at the cellular and subcellular levels and explain the experiments that developed this knowledge.
- 2. Describe the theories explaining the development of eucaryotes and the evolution of multicellular organisms.
- 3. Describe the structure and function of biological membranes and the processes that occur at cell surfaces and explain the experiments that developed this knowledge.
- 4. Describe the molecular structures and the biochemistry of the cytoskeleton, intracellular traffic and motility and explain the experiments that developed this knowledge.
- 5. Describe the basic processes involved in intracellular and intercellular signaling and how these processes impact the cell cycle and cancer theory. Explain the experiments that developed this knowledge.
- 6. Describe the fundamental principles of molecular biology and molecular genetics as they relate to the inheritance of genetic traits; the structure, replication and repair of DNA; and the transcription, processing and translation of RNA. Explain the experiments that developed this knowledge.
- 7. Describe the fundamental principles of molecular biology and molecular genetics as they relate to biotechnology; the laboratory manipulation of DNA, RNA and proteins; and the ethical issues surrounding such research and applications.

8. Describe, in detailed and specific terms, the fundamental processes that occur in respiration and photosynthesis.

# BIOL 275L Cell and Molecular Biology Lab (2) KCC AA/DY

4 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in BIOL 171 and a grade of "C" or higher in BIOL 171L and a grade of "C" or higher in CHEM 272 and a grade of "C" or higher in CHEM 272L and a grade of "C" or higher or concurrent enrollment in BIOL 275; or consent of instructor.

Comment: BIOL 275L is cross-listed with MICR 240 and MICR 230.

BIOL 275L is a lecture/laboratory in cell and molecular biology for life science majors. The course is taken either concurrently or after BIOL 275. Through lectures and laboratory exercises, students will acquire a fundamental understanding of the biochemistry of the cell. Students will also acquire competence in tissue culture and experience with modern advances in biotechnology and recombinant DNA technology.

Upon successful completion of BIOL 275L, the student should be able to:

- 1. Demonstrate proficiency in aseptic technique and in all of the basic procedures used in tissue culture and in a cell biology laboratory.
- 2. Describe the basic principles of protein chemistry and molecular biology and apply these principles in the design and interpretation of experiments utilizing enzymatic reactions, pcr, electrophoresis and immunoassays.
- 3. Describe in detail the organization of life at the cellular and subcellular levels.
- 4. Describe the structure and function of biological membranes and demonstrate an understanding of the processes that occur at the cell surface.
- 5. Describe in detailed and specific terms the fundamental catabolic and anabolic metabolic processes that occur at the cellular level.
- 6. Describe and experimentally manipulate the cytoskeleton particularly as it relates to intracellular traffic, cytokinesis and cell motility.
- 7. Describe and debate the ethical issues surrounding existing and proposed research and applications using living cells.

### **BOTANY**

# BOT 101 General Botany (3) KCC AA/DB and KCC AS/NS

3 hours lecture per week

Recommended Preparation: ENG 100.

BOT 101 discusses growth, functions and evolution of plants, their relations to the environment and particularly to humans and their activities.

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

- 1. Demonstrate knowledge of the important biological concepts and theories (as cell theory, energy flow, photosynthesis, growth, reproduction, etc) and recognize that they may be explained in terms of the natural laws of physics and chemistry.
- 2. Know the unique anatomical characteristics of major plant groups and relate these structures to the functions they perform.
- 3. Demonstrate the basic knowledge of plant genetics and evolution of floral structures in terms of ecology and morphology.
- 4. Develop a balanced and pragmatic knowledge in Botany.

## **BOT 101L General Botany Laboratory (1) KCC AA/DY**

3 hours lab per week

Prerequisite(s): Credit or concurrent enrollment in BOT 101.

Recommended Preparation: ENG 100.

BOT 101L focuses on laboratory observations and experiments illustrating basic principles of plant biology.

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

- 1. Cultivate responsibility and mutual respect for each other, especially during the discussions.
- 2. Demonstrate the ability of critical thinking and logical reasoning through the use of the scientific method.
- 3. Work independently or in groups in the laboratory by performing observations, drawings, dissections and behavioral objectives.

## BOT 105 Ethnobotany (3) KCC AA/DS and KCC AS/SS

3 hours lecture per week

BOT 105 is an introduction to plants and their influence upon the culture of Hawai'i and the Pacific. In BOT 105 the uses of cultivated and wild plants of the world are described.

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

- 1. Demonstrate the knowledge of habits, habitats, reproductions and interactions of plants and their environments.
- 2. Identify the role and influence played by plants on the culture of Hawai'i and Pacific.
- 3. Demonstrate a knowledge of the economic importance and ecology of cultivated as well as the wild plants in the world.
- 4. Understand and appreciate the complete dependence of all living things on plants.

### BOT 130 Plants in the Hawaiian Environment (3) KCC AA/DB and KCC AS/NS

*3 hours lecture per week* 

Recommended Preparation: Credit in or placement in ENG 100.

BOT 130 is an introduction to the plant species and communities of the Hawaiian ecosystems. It discusses the plant's evolution, ecology and economic values to humans. It also includes the observation and systematics of native and introduced flora.

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

- 1. Describe the geologic history of the Hawaiian Islands.
- 2. Describe the arrival and establishment of native and introduced species.
- 3. Compare the major Hawaiian ecosystems.
- 4. Compare/contrast variations of plant parts and functions.
- 5. Recognize common native and introduced plant species.
- 6. Examine the ecology and economic values of plant species
- 7. Examine the effects of humans on the flora of the Hawaiian Islands.

## BOT 130L Plants in the Hawaiian Environment Laboratory (1) KCC AA/DY

3 hours lab per week

*Prerequisite(s): Credit or concurrent enrollment in BOT 130.* 

BOT 130L focuses on observations of plant species, populations and communities as they interact with their environment through field survey methodologies and field trips. Students will become familiar with the taxonomy and ecology of native and introduced species.

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

- 1. Demonstrate the ability of critical thinking and logical reasoning through the use of scientific method.
- 2. Work independently or in groups in the laboratory by performing observations, dissections and completing behavioral objectives of each laboratory exercise.
- 3. Identify and characterize major plant families, species and economic plants.
- 4. Explain the effects of environmental factors on plant adaptation, dispersal and distribution.

## BOT 201 Plant Evolutionary Diversity (3) KCC AA/DB and KCC AS/NS

3 hours lecture per week

Prerequisite(s): BOT 101 or consent of instructor.

Corequisite(s): BOT 201L.

Recommended Preparation: ENG 100.

BOT 201 discusses evolutionary trends in the plant world, including reproductive, morphological and life history adaptations by algae, fungi and vascular plants.

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

- 1. Explain the role of evolution in plant diversity.
- 2. Distinguish between morphological and anatomical diversity among algae, fungi and plants.
- 3. Use the systematic botany to classify and name various species of algae, fungi and plants.
- 4. Describe the ecological niches of algae, fungi and plants.

## **BOT 201L Plant Evolutionary Diversity Laboratory (1) KCC AA/DY**

3 hours lab per week

Corequisite(s): BOT 201.

Comment: Letter grade or credit/no credit; BOT 201L may not be audited.

BOT 201L applies the principles discussed in BOT 201 through laboratory experiences in the lab setting and out in the field or natural ecosystem.

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

- 1. Identify and classify representative species of algae, fungi and vascular plants.
- 2. Sketch, classify and describe the various species of algae, fungi and vascular plants investigated in the laboratory
- 3. Prepare a scientific laboratory report with appropriate annotations.
- 4. Prepare herbarium specimens of appropriate species.
- 5. Apply the observational and experimental techniques and methodologies employed in the natural sciences.

#### **BUSINESS**

# BUS 100 Using Mathematics to Solve Business Problems (3) KCC AA/FQ

3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in MATH 75x or placement at MATH 100 or higher-level mathematics; and qualification for ESOL 94.

Comment: Students are strongly encouraged to obtain a calculator with graphing, statistical, and financial capabilities prior to the first day of class. Students should check with the instructor on the calculator models required for this course.

BUS 100 provides students with the foundations for problem-solving and quantitative reasoning skills essential in business. This course covers logic, financial functions, basic probability and basic statistics. BUS 100 also covers algebra and geometry of linear, quadratic, exponential, and logarithmic functions as applied to the mathematics of finance. The intent of this course is to assist students to use mathematics in exercising sound judgment in making personal and business decisions. This course uses technology tools such as calculators, spreadsheets, and statistical applications.

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

- 1. Analyze deductive arguments using elementary symbolic logic.
- 2. Solve linear, quadratic, exponential, and logarithmic equations with applications to business, such as solving for interest rates and various terms of investment.
- 3. Solve financial function involving single deposit compound interest and ordinary/due simple annuities.
- 4. Solve business problems involving the concepts of probability and statistics.
- 5. Visualize and interpret data using software tools.

## **BUS 120 Principles of Business (3)**

3 hours lecture per week

Recommended Preparation: ICS 101; and ENG 100 or ESL 100.

BUS 120 surveys the fundamentals of the American business enterprise in the local, national, and global environments. The course examines the foundations and responsibilities of accounting, management, finance, and marketing, as they interact in the business environment.

Upon successful completion of BUS 120, the student should be able to:

- 1. Identify the impact of local, national, and global external factors on business decisions relative to the accomplishment of the mission and objectives of an organization.
- 2. Define the various forms of business ownership to determine the appropriateness relative to an organization's resources, goals, and objectives.
- 3. Identify various business functions and practices -- including management, marketing, accounting, and finance -- and explain their impact on the successful operation of a business.
- 4. Identify legal, government, ethical and social responsibility issues or regulations affecting business decisions.

# BUS 195 (Alpha) Business, Legal and Technology (BLT) Department Industry Certification Preparation (1-3)

1 hour lecture per week per credit

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Advisor, BLT Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of a BLT department course as stipulated by the instructor.

BUS 195 (alpha) offers current industry certification preparation in areas covered by Business, Legal & Technology Department coursework.

Upon successful completion of BUS 195, the student should be able to:

1. Research topics related to the designated certification.

- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## BUS 195AL Certification Prep (A+, Net+, Sec+) (1-3)

*I hour lecture per week per credit* 

Prerequisite(s): Credit or concurrent enrollment in ITS 124 or ITS 122 or ITS 144; or consent of instructor or permission of BLT Academic Advisor, BLT Department Chair or any BLT Program Coordinator.

BUS 195AL is a preparation course for the CompTIA A+, Net+, and Sec+ certification exams.

Upon successful completion of BUS 195, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## **BUS 195CA A+ Certification Exam Prep (1)**

*I hour lecture per week* 

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Advisor, BLT

Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of ITS 144.

Comment: BUS 195CA must be taken for a letter grade only for program credit.

BUS 195CA is a preparation course for the CompTIA A+ certification exam.

Upon successful completion of BUS 195CA, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## **BUS 195CE ITS Certification Preparation in Ethical Hacker (1)**

1 hour lecture per week

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Adviser, BLT Department Chair or any BLT Program Coordinator Recommended Preparation: Completion of a BLT department course as stipulated by the instructor. ITS 142 and ITS 222 provide the training in advanced topics relating to network security and ethical hacking.

Comment: BUS 195CE must be taken for letter grade for program credit.

BUS 195CE prepares students to sit for the EC-Council Certified Ethical Hacker (CEH) certification exam.

Upon successful completion of BUS 195CE, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## **BUS 195CN Network+ Certification Exam Prep (1)**

1 hour lecture per week

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Advisor, BLT

Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of ITS 124.

Comment: BUS 195CN must be taken for a letter grade only for program credit.

BUS 195CN offers current industry certification preparation for the CompTIA Network+ Certification exam.

Upon successful completion of BUS 195CN, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## **BUS 195CP ITS Certification Preparation in Security Plus (1)**

1 hour lecture per week

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Adviser, BLT Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of a BLT department course as stipulated by the instructor.

BUS 195CP prepares students to sit for the Industry Certification Exam in CompTIA Security Plus.

Upon successful completion of BUS 195CP, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

# **BUS 195DV Data Visualization Certificate Preparation (1)**

1 hour lecture per week

Comment: BUS 195DV must be taken for a letter grade only for program credit.

BUS 195DV is a preparation course for Microsoft Certification exam 70-778 - Analyzing and Visualizing Data with Microsoft Power BI. It will provide practice and test preparation for students interested in obtaining industry certification in Data Visualization.

Upon successful completion of BUS 195DV, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.
- 5. Define Data Visualization and Data Visualization tools for current application.

## **BUS 195LA LAW Certification Preparation in Relativity (1)**

*I hour lecture per week* 

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Adviser, BLT Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of a BLT department course as stipulated by the instructor.

Comment: BUS 195LA must be taken for credit only for program credit.

BUS 195LA prepares students to sit for the basic Relativity Certified User Exam.

Upon successful completion of BUS 195LA, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.
- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## BUS 195QB ACC Certification Preparation in QuickBooks Online ProAdvisor (1)

1 hour lecture per week per credit

Prerequisite(s): Consent of instructor **or** permission of BLT Academic Adviser, BLT Department Chair or any BLT Program Coordinator.

Recommended Preparation: Completion of a BLT department course as stipulated by the instructor.

BUS 195QB prepares students to sit for the Industry Certification Exam in Online QuickBooks.

Upon successful completion of BUS 195QB, the student should be able to:

- 1. Research topics related to the designated certification.
- 2. Identify key subjects, relevant data, and propose possible solutions.

- 3. Review and recall materials related to the certification topic.
- 4. Demonstrate competence and proficiency in certification areas.

## BUS 250 Applied Mathematics in Business (3) KCC AA/FQ

*3 hours lecture per week* 

Prerequisite(s): A grade of "C" or higher in MATH 103 or qualification for MATH 135. Recommended Preparation: Credit in or qualification for ENG 100, ESL 100, ICS 100 or ICS 101 or higher level equivalent courses.

Comment: Students should purchase a financial calculator for financial capabilities prior to the first day of class. Students should check with the instructor on the calculator models required for this course.

BUS 250 provides students with problem-solving and quantitative reasoning skills essential in business. Beginning with a review of relevant concepts from algebra, it covers topics in the mathematics of finance, calculus emphasizing business applications, probability, and introductory statistics. BUS 250 uses a financial calculator and spreadsheets.

Upon successful completion of BUS 250, the student should be able to:

- 1. Apply the concept of Time Value of Money (TVM) to find the solution to problems involving present value (PV), future value (FV), annuities (PMT), and vanilla bonds.
- 1. Apply elementary combinatorial techniques, permutations, and combinations, and use key concepts in discrete probability.
- 2. Recognize that the discrete binomial distribution to continuous Gaussian normal distribution is an integral that provides the cumulative probability.
- 3. Recognize the role of hypothesis testing, the sampling distribution, and the p-value in statistics.
- 4. Determine the error function for a sample data and explain that the derivative can minimize the error function which will provide the coefficients for the best-fit line.

#### **BUSINESS LAW**

# **BLAW 200 Legal Environment of Business (3)**

*3 hours lecture per week* 

Recommended Preparation: Placement in ENG 100 or ESL 100.

BLAW 200 is an introduction to the legal environment of business with particular emphasis on sources of law and torts, contracts, agency, partnership, corporations, Uniform Commercial Code, government regulations, and ethics.

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

- 1. Examine the American system of jurisprudence, with emphasis on explaining sources and hierarchy of laws, legal terminology, court procedures, and levels and types of courts.
- 2. Examine principles surrounding the resolution of legal disputes outside the courtroom, with emphasis on explaining the several types of forums available, and examining ethical principles and their impact on business decisions.
- 3. Examine the three branches of government in America, with emphasis on explaining how laws are created and enforced by the three branches of government at the national, state and local levels, and explaining how laws are enforced against businesses.
- 4. Examine numerous areas of law applicable to businesses in America, with emphasis on explaining the legal elements, available defenses and types of damages recoverable under each area of law.
- 5. Demonstrate effective communication and teamwork skills.