HAWAIIAN

HAW 101 Elementary Hawaiian I (4) KCC AA/HSL
4 hours lecture per week

Comment: Students with prior experience in the Hawaiian language may be able to earn back credits. They should take a language placement test at the Lama Library Testing Center before registering or contact the instructor.

HAW 101 introduces the study of basic structures of the Hawaiian language with emphasis on the five recognized skills: listening, speaking, reading, writing, and cultural understanding.

Upon successful completion of HAW 101, the student should be able to:
1. Communicate orally in Hawaiian at a novice mid level.
2. Produce and interpret written Hawaiian at a novice mid level.
3. Utilize vocabulary and other language skills that integrate work, school, family, ʻāina, and language in real life.
4. Recognize the relationship between the practices and perspectives of Hawaiian culture.

HAW 102 Elementary Hawaiian II (4) KCC AA/HSL
4 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in HAW 101 **or** satisfactory score on language placement test **or** consent of instructor.*
Comment: Students with prior experience in the Hawaiian language may be able to earn back credits. They should take a language placement test at the Lama Library Testing Center before registering or contact the instructor.

HAW 102 focuses on basic structures of the Hawaiian language with emphasis on the five recognized skills of language acquisition: listening, speaking, reading, writing, and cultural understanding. This course is taught within the context of the contemporary culture of the Hawaiian people.

Upon successful completion of HAW 102, the student should be able to:
1. Communicate orally in Hawaiian at a novice high level.
2. Produce and interpret written Hawaiian at a novice high level.
3. Utilize vocabulary and other language skills that integrate work, school, family, ʻaina, and language in real life.
4. Recognize the relationship between the practices and perspectives of Hawaiian culture.

HAW 201 Intermediate Hawaiian I (4) KCC AA/HSL
4 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in HAW 102 **or** satisfactory score on language placement test **or** consent of instructor.*
Comment: Students with prior experience in the Hawaiian language may be able to earn back credits. They should take a language placement test at the Lama Library Testing Center before registering or contact the instructor.

HAW 201 is a continuation of HAW 102. Further development of the five recognized skills of language acquisition: listening, reading, writing, speaking, and cultural understanding in the Hawaiian language. Students will gain these five skills, attaining the Intermediate Low level on the ACTFL proficiency scale.

Upon successful completion of HAW 201, the student should be able to:
1. Communicate orally in Hawaiian at an intermediate low level.
2. Produce and interpret written Hawaiian at an intermediate low level.
3. Demonstrate an understanding of the grammatical and structural aspects of Hawaiian.
4. Apply and interpret vocabulary and other language skills that integrate work, school, family, 'āina, and language in real life applications.
5. Hōʻike (Demonstrate) practices and perspectives of Hawaiian culture.

HAW 202 Intermediate Hawaiian II (4) KCC AA/HSL
4 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in HAW 201 **or** satisfactory score on KapCC language placement test **or** instructor consent.*
Comment: Students with prior experience in the Hawaiian language may be able to earn back credits. They should take a language placement test at the Lama Library Testing Center before registering or contact the instructor.

HAW 202 is a continuation of HAW 201. Further development of the five recognized skills of language acquisition: listening, reading, writing, speaking, and cultural understanding in the Hawaiian language. Students will gain the five skills, attaining the Intermediate Mid level on the ACTFL proficiency scale.

Upon successful completion of HAW 202, the student should be able to:
1. Communicate orally in Hawaiian at an intermediate mid level.
2. Produce and interpret written Hawaiian at an intermediate mid level.
3. Demonstrate an understanding of the grammatical and structural aspects of Hawaiian.
4. Apply and interpret vocabulary and other language skills that integrate work, school, family, 'āina, and language in real life applications.
5. Hōʻike (Demonstrate) practices and perspectives of Hawaiian culture.

HAW 224 Intermediate Hawaiian Reading (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in HAW 202 **or** consent of instructor.*

HAW 224 is an intermediate level course taught in the medium of Hawaiian language. This course will serve as a bridge course to the third year Hawaiian language classes by increasing fluency in reading, writing, and speaking in the target language.

Upon successful completion of HAW 224, the student should be able to:
1. Demonstrate ease and fluency in reading a variety of Hawaiian language texts including historical documents, stories, chants, songs, newspapers, fiction and non-fiction.
2. Apply pre-reading skills to Hawaiian texts in order to focus attention on the material and be able to better comprehend overall theme and major ideas without having to translate word for word.
3. Show ability to read and decipher older Hawaiian language documents written without diacritical marks and understand orthographic conventions and grammar patterns unique to written Hawaiian.
4. Explain basic elements of Hawaiian literary style including the use of wise sayings, repetition, play on words, natural imagery, dualism, naming, songs of praise glorifying heroes and chiefs.
5. Demonstrate ability to formulate comprehension questions, to summarize and analyze written Hawaiian materials.
6. Demonstrate sensitivity to the vibrant poetic, cultural heritage and distinctly Hawaiian world views embodied in Hawaiian language texts.

HAW 261 Hawaiian Literature in Translation: Pre-1800 traditions (3) KCC AA/DL and KCC AS/DH
3 hours lecture per week Prerequisite(s): HAW 101.

Recommended Preparation: Credit in or placement in HWST 107.

HAW 261 is a survey of Hawaiian oral arts and traditions in translation, including narratives, chants, and proverbs from the period before Western contact, with reference to Polynesia and Western themes and forms.

Upon successful completion of HAW 261, the student should be able to:
1. Demonstrate knowledge of the world view that is exemplified in Hawaiian oral arts and traditions.
2. Demonstrate knowledge of the forms and content of Hawaiian oral arts and traditions.

3. Identify major themes in Hawaiian oral arts and traditions and explore their implications.
4. Identify and explain figurative language and narrative, poetic, and linguistic techniques used by storytellers, chanters, and orators.
5. Express ideas and opinions about Hawaiian oral arts and traditions clearly and convincingly, both orally and in writing, using the terminology of literary and/or cultural analysis and providing textual evidence to support opinions and ideas.

HAW 262 Hawaiian Literature in Translation: 1800 to Present (3) KCC AA/DL and KCC AS/DH
3 hours lecture per week

Prerequisite(s): HAW 102 Recommended Preparation: HWST 261

HAW 262 offers a survey of Hawaiian literature, featuring selected works by Hawaiian authors from the period following Western contact (c. 1800) and the introduction of writing and the printing press. While texts translated into English will be the required readings, selected Hawaiian texts may be presented for comparative purposes.

Upon successful completion of HAW 262, the student should be able to:
1. List and describe some of the major authors of Hawaiian literature.
2. Consider works of Hawaiian literature as reflections of their cultural milieu and compare that milieu with his or her own.
3. Give examples of various forms and content of Hawaiian literature.
4. Discuss major themes in Hawaiian literature, explain their implications, and identify their basic assumptions.
5. Identify and explain figurative language and narrative, poetic, and linguistic techniques used by authors of Hawaiian literature.
6. Express insights and responses to Hawaiian literature clearly and effectively both orally and in writing, using the terminology of literary and/or cultural analysis and providing textual evidence to support opinions and ideas.

HAW 290 Ma Ka Hana Ka ʻOlelo me Ka ʻIke Hawaiʻi (4) Spring KCC AA/DH and KCC AS/DH
4 hours lecture per week

*Prerequisite(s): Students must be native **or** bilingual speakers of Hawaiian and English **or** advanced level Hawaiian speaking students**; and** consent of instructor. (Koina Mua: He pono ka haumana i ke kulana manaleo, kulana olelo lua Hawaiʻi me ka Haole, a i ʻole kulana ʻolelo Hawaiʻi kiʻekiʻe. He pono ka ʻapono ʻia a ke kumu.)*
Comment: HAW 290 is offered in the Spring semester only. HAW 290 is designed for native speakers, bilingual and advanced level Hawaiian speaking students. Instructor approval is required. (Manaʻo Hoʻopuka: Ua haku ʻia keia papa 290 na haumana i ke kulana manaleo, kulana olelo lua, a i ʻole kulana ʻolelo Hawaiʻi kiʻekiʻe. He pono ka ʻapono ʻia a ke kumu.)

HAW 290 is designed to prepare students to serve as Hawaiian language and culture resources on campus and in the community through ʻaina learning experiences. Application of ʻaina learning experiences, moʻoʻōlelo, and personal reflections will serve as the basis for communicative activities in class. (HAW 290 he papa i haku ʻia i hoʻomākaukau i nā haumāna e lilo i mau kākoʻo ma ke kula nui kaiāulu a ma ke kaiāulu nō hoʻi ma o ka mālama ʻāina. Ma o ka hana mālama ʻāina, moʻoʻōlelo me ka hōʻike noʻonoʻo pili kino ke kahua no ka hana ʻōlelo ma nēia papa.)

Upon successful completion of HAW 290, the student should be able to:
1. Demonstrate advanced mid-level proficiency of the Hawaiian language and Hawaiian grammar.
2. Apply orally and in writing critical thinking and problem-solving skills related to contemporary issues of Hawaiian language in education, Hawaiian culture and worldview, religion, politics, and resource management.
3. Identify and utilize written and oral sources of Hawaiian moʻoʻōlelo, Hawaiian language, and Hawaiian language source documents. Analyze the relationship to Hawaiian worldview and traditional writing and language use. Apply this analysis to coursework in other disciplines.
4. Complete research tasks using the Hawaiian language newspapers and traditional writing styles in the Hawaiian language as it pertains to culture and the kanaka worldview.
5. Evaluate orally and in writing the ʻāina-based learning activities using appropriate vocabulary and grammar in communicative activities, discussions, and writing activities.

6. .List similarities and differences between Hawaiian and U.S. culture from various perspectives and values.
    I ka hoʻokō kūpono o ka papa HAW 290, e hiki ana i ka haumāna ke:
1. E hōʻike aku i ke kūlana kiʻekiʻe waena o ka ʻōlelo Hawaiʻi me kona mau pilinaʻōlelo.
2. Ma o ka ʻōlelo me ke kākau e hoʻohana ai i ka noʻonoʻo kūpono me nā hana hoʻoponopono i pili pū i nā pili kia hou e ili mai ma luna o ka ʻōlelo Hawaiʻi ma ka ʻimi naʻauao, ʻike Hawaiʻi me ka ʻike laulā, hoʻomana, hana kālaiʻāina, me ka malama ʻāina.
3. Hōʻoia ʻike maka me ka hoʻohana i nā kūmole haʻiwaha moʻoʻōlelo, ʻōlelo Hawaiʻi, me nā palapala kūmole ʻōlelo Hawaiʻi. Kālailai i ka pilina i ka ʻike ākea Hawaiʻi, kākau kūpuna, me ka ʻōlelo kūpuna. Hoʻohana i nēia kālailai i ka haʻawina o nā papa ʻē aʻe.
4. Hoʻokō i na hana noiʻi me ka hoʻohana pū i nā nūpepa ʻōlelo Hawaiʻi, nā kākau kaila Hawaiʻi, ma o ka ʻōlelo Hawaiʻi me kona pilina i ka moʻomēheu me ko ke kanaka ʻike ākea.
5. Ma o ka ʻōlelo a me ke kākau e hōʻike aku ai i ka hana mālama ʻāina me ka hoʻohana kūpono ʻia o nā huaʻōlelo me nā pilinaʻōlelo ma nā haʻiʻōlelo, ke kūkākūkā, a me ka hana kākau.
6. Helu i nā mea kūlike me nā mea ʻokoʻa ma waena o ka moʻomēheu Hawaiʻi me ke ʻano o ka ʻAmelika.

HAWAIIAN STUDIES

HWST 100 Introduction to Hawaiian Culture (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week Recommended Preparation: HAW 101.

HWST 100 is an introduction to Hawaiian cultural traditions, from ancient to modern times. It provides an overview of ancient concepts that still influence Hawaiian thinking today, including the intimate connection between human beings and nature, the importance of connection to a place and a genealogy, and the importance and definition of living by Hawaiian values.

Upon successful completion of HWST 100, the student should be able to:
1. Utilize a basic knowledge of the Hawaiian Language, including pronunciation and commonly used words and phrases, and the significance to Hawaiians of language and names.
2. Identify the major geographic features of the Hawaiian Islands, including but not limited to the islands, channels, traditional land divisions, and other prominent features both natural and man-made.
3. Outline the foundations of Hawaiian culture, including language, values, and metaphysical concepts; various stories of origin; and societal structures, including the Hawaiian caste and kinship systems.
4. Research and present personal genealogical information and correlate the importance of such knowledge to Hawaiian culture and society.
5. Explain the major activities and occupations of everyday life in traditional Hawaiian culture and the various factors that influenced subsequent changes, up to and including contemporary times.
6. Correlate major events in Hawaiian history with their subsequent impacts on Hawaiian culture.
7. Evaluate their own personal stake/perspective/connection to the topics and material covered in class as members of the society currently living in the islands.

HWST 107 Hawai`i: Center of the Pacific (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

Recommended Preparation: ENG 100 or ENG 160 or ESL 100.

HWST 107 Surveys the Pacific Islands of Melanesia, Micronesia, and Polynesia; their various origins, geography, languages, religions, colonial histories and modern development, seen through the cultural lens of the Hawaiian people.

Upon successful completion of HWST 107, the student should be able to:
1. Demonstrate knowledge of the origins, migrations and settlement patterns of Oceania.
2. Show knowledge of similarities and differences between Native Hawaiians and other Oceanic people's cultures, languages, religions, arts and natural resources.
3. Explain the connections of historical events to modern issues in relation to the unique social, political and economic history of Hawaii, including concepts such as colonization and decolonization, occupation, independence movements, sovereignty.

HWST 110 Huakaʼi Waʼa: Introduction to Hawaiian Voyaging (3)
3 hours lecture per week

*Prerequisite: Qualification for ENG 100 **or** ESL 100.*
Recommended Preparation: Familiarity with Hawaiian language and culture.

HWST 110 introduces students to modern Hawaiian canoe voyaging through an examination of the science and narratives of ancient voyaging, the history of the modern revival of voyaging, and the Hawaiian navigator's tool kit.

Upon successful completion of HWST 110, the student should be able to:
1. Locate and name the islands and island groups of Oceania.
2. Explain the various aboriginal and academic narratives relating to the migration to and settlement of Oceania.
3. Discuss the historical and cultural events leading to the revival and reestablishment of Hawaiian voyaging.
4. Describe the tools contemporary navigators use for open-ocean voyaging.

HWST 207 Hawaiian Perspectives in Ahupuaʻa Resource Management (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HWST 107.
Comment: Transportation may be required for off campus visits to different ahupuaʼa or wahi pana.

HWST 207 will examine the ahupuaʻa system: its mythologies, place names, history, poetry and early documents of the Hawaiian nation, as it was conceptualized by the ancient Hawaiians and exploration of its relevance in modern society. The primary focus of this course will be the Hawaiian land division: the Ahupuaʻa. Through an understanding of the ahupuaʻa, students will become familiar with perspective on Hawaiian resource management and Hawaiians' relationship with the ʻāina. This course will emphasize ʻĀina based learning.

Upon successful completion of HWST 207, the student should be able to:
1. Describe Hawaiian Perspectives in resource management and geography.
2. Identify various Hawaiian methods of knowing a place.
3. Demonstrate the use of appropriate archival resources as related to Hawaiian resource management.
4. Compare/contrast the use of ideographic and nomothetic approaches as applied to ʻĀina based learning.

HWST 216 History of Surfing (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

Recommended Preparation: HWST 107.

HWST 216 is a study of the traditional native sports practices of the Hawaiian people that symbolized the native people's relationship to the ʻāina (land) and how such sports are significant components to understanding the Hawaiian culture, and were/are unique identifiers of the native identity.

Upon successful completion of HWST 216, the student should be able to:
1. Locate surfing within the tradition of sports practices of the Hawaiian people and discuss its cultural significance.
2. Use archeological concepts to reconstruct the origins and significance of native architecture as it pertains to surfing.
3. Describe the native Hawaiian environment and its natural resources, and explain how surfing has a significance in their proper management.
4. Explain the significance and physical characteristics of native imagery.
5. Analyze critically, through the lens of surfing, the cultural impact and the residual effects of the Western value system on the physical and spiritual world of the Hawaiian people.

HWST 222 Introduction to Hawaiian Fiber Arts Studio: Hana Noʻeau Māʻawe (3) KCC AA/DA and KCC AS/AH
6 hours lecture/lab per week

Recommended preparation: HAW 101.
Comment: Materials and supplies for HWST 222 will cost approximately $80.00. HWST 222 may not be audited.

HWST 222 offers an introduction to a variety of fibers used in Hawaiian culture. Emphasis on cultivation, preparation, uses and conservation of fibers. Areas explored are kapa, plaiting, netting and twining.

Upon successful completion of HWST 222, the student should be able to:
1. Explore and develop an understanding of historical and cultural application of Hawaiian customary practices in fibers by planning, preparing, creating, and finishing, in a timely manner, projects of Hawaiian cultural relevance through documentation and practice. Ulana (plaiting), Kapa (bark cloth), ʻUpena (netting) and Hana ʻIeʻie (twining).
2. Research and write a cultural research paper that articulates the cultural practice of each fiber media (4) learned within this course.

HWST 255 Introduction to the Hawaiian Kingdom (3) KCC AA/DS
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HWST 107.

HWST 255 focuses on the Hawaiian Kingdom era covering two major historical periods: the first from 1810 until 1893; the second from 1893 to the present. This course focuses primarily on the first historical period, allowing the legal, political, and economic conclusions from that era to inform and provide for us a continuity into the second historical period. Major topics addressed in this course are: unification; the Hawaiian Constitutions; recognition and nationhood in 1843; feudal and allodial land systems; the Hawaiian economy; the Hawaiian monarchs; the occupation of the Hawaiian Islands; issues and methods of de-occupation; historical, political, legal, and economic global contexts.

Upon successful completion of HWST 255, the student should be able to:
1. Trace the development of the Hawaiian Kingdom from a pre-contact feudal society to an internationally recognized Nation-State;
2. Define and contrast various legal terms used in both Domestic and International Law;
3. Compare and contrast objective versus subjective and positive versus normative interpretations of knowledge;
4. Apply methodological reasoning as analysis for discussions on various models of historical, political, and economic constructs;
5. Describe the internal workings of the various Hawaiian Constitutions, their creation, implementation, and legal authority.
6. Analyze the theory, legal basis, and import of the Mahele as a unique land tenure conversion system.
7. Explain the genealogy, historical significance, and various roles in government of the Aliʻi Nui.

HWST 257 Māhele: Hawaiian Land Tenure (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HWST 107.
Comment: Transportation may be required for off campus visits to the Hawaii State Archives, Bureau of Conveyance, Hawaii State Survey Office, Honolulu Tax Map Office, and other governmental and public archives.

HWST 257 is an introduction to the Māhele of 1848 and the evolution of Hawaiian Land tenure resulting in a hybrid system of private property in the mid-19th century. This course will survey 1) the major conceptual categories of land title that was created (Government Lands, King/Crown Lands and Land Commission Awards) and 2) the specific instruments of title created (Royal Patent Grants, Land Patent Grants, Kamehameha Deeds, Crown Land Leases, Oral Gifts, Konokiki Awards and Kuleana Awards) in the evolution from an oral to a written system of land title. Emphasis will be placed on improving the students' information literacy skills with primary and secondary data sources. This course will also discuss the implications of Hawaii's unique system of land law and how traditional land rights are applicable today.

Upon successful completion of HWST 257, the student should be able to:
1. Describe the important terminology, concepts and facts associated with Hawaiian land tenure.
2. Identify the appropriate use and application of Primary and Secondary Source material in relation to the Mahele.
3. Identify, locate and use appropriate archival Mahele Documention (Land Commission Awards, the Mahele Book, Royal Patent Grants, Land Patent Grants, Kamehameha Deeds, Hawaii Government Survey Maps, etc) for research purposes.
4. Explain the connections of historical events to modern issues in relation to the unique evolution of Hawaiian land law (including concepts such as occupation, sovereignty, civil/common law legal systems, and "ceded lands").

HWST 270 Hawaiian Mythology (3) KCC AA/DL and KCC AS/AH
3 hours lecture per week

Prerequisite(s): HWST 100 or HWST 107 or HAW 102 or consent of instructor. Recommended preparation: Qualification for ENG 100.

HWST 270 is an introduction to Hawaiian mythology and mo'olelo as a basis of understanding (or a reflection) of Hawaiian culture, values, metaphor, and worldviews. This course will investigate and analyze oral and written Hawaiian literary sources and the roles of akua, 'aumakua, kupua, and kanaka.

Upon successful completion of HWST 270, the student should be able to:
1. Analyze the relationship between Hawaiian moʻolelo (mythologies) and Hawaiian worldview, including Hawaiian cultural values and traditions.
2. Identify and utilize written and oral sources of Hawaiian moʻolelo.
3. Employ the terminology of literary and/or cultural analysis in the study of Hawaiian moʻolelo.
4. Describe akua (deities), kupua (deities), ʻaumakua (ancestral family deities), and kanaka (humans) and their various forms from Hawaiian moʻolelo.

HWST 281 Hoʻokele I: Hawaiian Astronomy and Weather (3)
3 hours lecture per week Corequisite(s): HWST 281L.

Recommended Preparation: HWST 107.
Comment: HWST 281 is repeatable up to 6 credits.

HWST 281 is an introduction to Hawaiian views of astronomy and weather, required as preparation for sailing a double hull canoe in the following semester.

Upon successful completion of HWST 281, the student should be able to:
1. Demonstrate knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and explain how these concepts compare with Western concepts.
2. Identify and name the component parts of the star compass used by Polynesian Voyaging Society (PVS) trained navigators.
3. Identify and name (both Hawaiian and non- Hawaiian names) the four star lines used by contemporary Hawaiian wayfinders.
4. Identify and name the stars and constellations that make up the individual star lines.
5. Identify and explain the declination of each star and how they relate to significant places in broader Polynesia.
6. Critically examine and explain the differences between the Micronesian star compass used by Mau Piailug and the contemporary wayfinding star compass.
7. Demonstrate knowledge of the stories, both traditional and contemporary, that are attached to the stars, constellations and star lines used by wayfinding navigators.
8. Identify and explain significance of celestial bodies and atmospheric and oceanic features and conditions used in navigation and weather prediction.
9. Demonstrate a basic knowledge of non-instrument and instrument-aided navigation and weather.

10. Demonstrate a basic knowledge of the richness of the Hawaiian language in describing geography and navigation, and demonstrate knowledge of how the terminology reflects a Hawaiian worldview.

HWST 281L Hoʻokele I: Hawaiian Astronomy and Weather Lab (1)
3 hours lab per week

Corequisite(s): HWST 281.
Recommended Preparation: HWST 107.
Comment: HWST 281L is repeatable up to 2 credits. Labs are scheduled at night to allow for night-sky observations.

HWST 281L is a stargazing laboratory to accompany HWST 281.

Upon successful completion of HWST 281L, the student should be able to:
1. Apply practical knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and how these concepts compare with Western concepts.
2. Identify and name the component parts of the star compass used by Polynesian Voyaging Society (PVS) trained navigators in a live setting.
3. Identify and name (both Hawaiian and non-Hawaiian names) the four star lines used by contemporary Hawaiian wayfinders in a live setting.
4. Identify and name the stars and constellations that make up the individual star lines in a live setting.
5. Identify and explain the declination of each star and how they relate to significant places in broader Polynesia.
6. Apply knowledge of the stories, both traditional and contemporary, that are attached to the stars, constellations and star lines used by wayfinding navigators in a live setting.
7. Identify and explain significance of celestial bodies and atmospheric and oceanic features and conditions used in navigation a weather prediction in a live setting.
8. Demonstrate a basic knowledge of non-instrument and instrument-aided navigation and weather in a live setting.

HWST 282 Hoʻokele II: Hawaiian Navigation, Weather, Canoe Design & Sailing (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): HWST 281 **or** consent of instructor.*
Corequisite(s): HWST 282L.
Recommended Preparation: HWST 107.

HWST 282 introduces students to traditional knowledge of Hawaiian voyaging and navigation and to the modern revival of voyaging arts in Hawaiʻi and the Pacific through a survey of history of navigation; introduction of skills needed to navigate double hulled voyaging canoes; survey of canoe design in Hawaiʻi and the Pacific; introduction of sailing dynamics; overview of weather and sea conditions in Hawaiʻi and the Pacific; introduction to sail planning including dead reckoning, steering by the stars, and other methods used by traditional navigators. The course places Hawaiian navigation and voyaging in the context of Polynesian and Pacific cultures and the pre-European discovery and settlement of the Pacific islands and its application in the contemporary Pacific.

Upon successful completion of HWST 282, the student should be able to:
1. Recognize and explain the shared elements, conflicts, and affirmations in indigenous traditions of voyaging in Hawaiʻi and the Pacific, from pre-European contact to the revival of voyaging arts in modem times.
2. Demonstrate knowledge of the voyages of Hōkūleʻa and other modem Pacific canoes and what has been learned from such voyages about traditional navigation, voyaging, and migration routes.
3. Demonstrate knowledge of the Pacific-wide cross-cultural exchanges that are taking place in the modem revival of Hawaiian voyaging.
4. Demonstrate knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and how these concepts compare with Western concepts.
5. Demonstrate knowledge of non-instrument navigation.
6. Demonstrate knowledge of traditional concepts of wind and weather and non- instrument weather forecasting.

7. Demonstrate knowledge of voyaging canoe design and building materials, techniques, and protocols.
8. Demonstrate knowledge of provisioning for traditional and modem voyages.
9. Demonstrate knowledge of Hawaiian and Polynesian voyaging traditions and voyagers and the cultural perspectives, values, and world views they represent; explain by comparison and contrast these cultural perspectives, values, and world views to those of contemporary Western societies.
10. Critically examine and explain oral traditions and modern theories and facts about the discovery and settlement of Hawaiʻi and other Pacific islands.
11. Demonstrate knowledge of Pacific geography, weather systems, and oceanic currents and conditions, as related to the discovery and settlement of the Pacific islands.
12. Demonstrate knowledge of the significance of voyaging in the revival of native Hawaiian culture and education in modern times.

HWST 282L Hoʻokele II: Hawaiian Navigation, Weather, Canoe Design & Sailing Lab (1) KCC AA/DH
3 hours lab per week

Corequisite(s): HWST 282.
Recommended Preparation: HWST 107.
Comment: HWST 282L is repeatable up to 2 credits. Some ocean experience and experience on boats. Knowledge of oneʻs susceptibility to seasickness and ways of preventing or dealing with seasickness, as needed. Students will demonstrate basic swimming and will be provided personal flotation devices if unable to demonstrate basic swimming. Students should have the ability to jump onto the deck of a boat that is 1-2 feet below the pier level. Some heavy lifting (e.g. pulling up an anchor) may be required.

HWST 282L introduces students to hands-on traditional knowledge of Hawaiian voyaging and navigation aboard a double hulled canoe sailing laboratory.

Upon successful completion of HWST 282L, the student should be able to:
1. Demonstrate practical application of the knowledge of traditional Hawaiian and Polynesian concepts of the cosmos, space, direction, and time and how these concepts compare with Western concepts.
2. Demonstrate the ability to identify the four major star lines used by the Polynesian Voyaging Society.
3. Demonstrate knowledge of appropriate cultural protocol and values associated with sailing Hawaiian and Polynesian voyaging canoes.
4. Identify and explain the dangers associated with sailing can and practice procedures and the use of equipment to safeguard against harm and injury at sea.
5. Identify and explain emergencies that may occur at sea and explain practice procedures while utilizing proper equipment to respond to an emergency that will prevent injury or loss of life.
6. Demonstrate ability to accurately monitor weather and ocean patterns to determine safe ocean conditions for sailing on a designate vessel to the destination indicated in the sail plan.
7. Demonstrate knowledge of the roles and responsibilities of the captain, navigator and other crew positions on board the sailing canoe.
8. Demonstrate knowledge of the parts of the canoe and canoe rigging.
9. Demonstrate skills to sail a canoe which include: tying and untying knots, casting off from a dock or weighing anchor, paddling, rigging the mast, setting the sails, steering, tacking, stopping, anchoring and docking.
10. Demonstrate competency in coordinating activities of a sailing canoe and an escort vessel.

HWST 285 Lāʻau Lapaʻau: Hawaiian Medicinal Herbs (4) KCC AA/DH
3 hours lecture, 3 hours lab per week

*Prerequisite(s): HWST 100 **or** HWST 107.*
Recommended Preparation: HAW 101.
Comment: HWST 285 may not be audited. Other equipment includes: A blender, chopping board, knife and containers are strongly suggested materials. Students are encouraged to have their own equipment, but sharing is acceptable.

HWST 285 is a study of the traditional practice of lāʻau lapaʻau or the use of traditional Hawaiian medicinal herbs. This course will introduce the student to the basic Hawaiian Medicinal plants, how to identify them by name, color, smell, taste and sight, and how to prepare them for application. Lāʻau Lapaʻau is a significant component to understanding the Hawaiian culture, and remains as a unique identifier of native Hawaiian culture.

Upon successful completion of HWST 285, the student should be able to:
1. Identify traditional plants used for practice of Hawaiian healing and their cultural significance.
2. Demonstrate a conceptual and working knowledge of these medicinal plants through hands on preparation and application.
3. Reconstruct through preparation process the traditional knowledge archaeology, the origins and significance of native healing practices.
4. Describe the native environment and the significance of proper management.
5. Illustrate the physical characteristics of these various plants.
6. Analyze critically the cultural impact and the residual effects of the Western system on the physical and spiritual world of the Hawaiian.

HEALTH

HLTH 118 Therapeutic Interpersonal Skills (3)
3 hours lecture per week

*Recommended Preparation: Qualification for ENG 100 **or** qualification for ESL 100. Comment: Letter grade only. HLTH 118 may not be audited. HLTH 118 may not be taken credit/no credit. Students are required to participate in service learning. Effective Fall 2019 HLTH 118 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.*

HLTH 118 provides students with the opportunity to assess themselves, their values, and associated professional attitudes and behaviors. Characteristics of effective helpers, appropriate communication techniques, assertiveness skills, and problem-solving for ethical and cultural issues are examined. These concepts are applied in health care settings that involve individuals and groups who require intervention services.

Upon successful completion of HLTH 118, the student should be able to:
1. Define self-awareness and values and their effect on human behavior and helping.
2. Articulate the ethical and practical considerations that affect the health and wellness needs of those who are experiencing or are at risk for social injustice, occupational deprivation, and disparity in the receipt of services.
3. Demonstrate knowledge of global social issues and prevailing health and welfare needs of populations with or at risk for disabilities and chronic health conditions.
4. Demonstrate knowledge and appreciation of the role of sociocultural, socioeconomic, and diversity factors and lifestyle choices in contemporary society (e.g., principles of psychology, sociology, and abnormal psychology).
5. Demonstrate an understanding of health literacy and the ability to educate and train the client, caregiver, and family and significant others to facilitate skills in areas of occupation as well as prevention, health maintenance, health promotion, and safety.
6. Give examples of effective communication techniques and application using characteristics of effective helping, cultural sensitivity, and assertiveness.
7. Define professional burnout and identify stress management techniques to promote wellness.

HLTH 120 Introduction to the Health Professions (1)
1 hour lecture per week

Comment: Effective Fall 2019 HLTH 120 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 120 introduces students to concepts of health and disease, health care systems, organizational structure and function of primary, tertiary, and community-based health facilities, health care ethics, and the health care team in individualized patient care.

Upon successful completion of HLTH 120, the student should be able to:
1. Identify and integrate use of electronic media to effectively communicate with various health care professions.
2. Explain the characteristics of community-based health care and describe the role of the health care team in providing patient care.
3. Explain the differences between health professions and describe examples of ethical concerns facing health care practitioners.
4. Identify, define, and relate requirements to study in selected program or occupation in order to describe the organizational structure of a hospital, health care clinic, or community-based agency.

HLTH 121 Health Care Career Shadowing (1)
A total of 45 hours observation and discussion

Prerequisite(s): A grade of "C" or higher in HLTH 120.
Comment: HLTH 121 may not be audited. HLTH 121 may only be taken credit/no credit. Effective Fall 2019 HLTH 121 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 121 is intended for the student who desires an in-depth opportunity to explore various health care careers and to decide which would be most appropriate to pursue.

Upon successful completion of HLTH 121, the student should be able to:
1. Describe five health care occupations in terms of responsibilities, role in patient care, interaction with at least two other types of health care providers, working conditions, educational requirements, licensure or certification required, and how they might or might not serve as career options.
2. Describe the one health care occupation the student is most interested in pursuing as a possible career option in terms of the student's own interests, values, abilities, and circumstances.
3. Identify the gaps between personal skill levels in math and English and the levels required for the health care occupation of interest.
4. Identify steps to be taken to acquire the necessary education, skills, etc. required to meet the job requirements of the selected health care occupation.
5. Describe the basic requirements of the Health Insurance Portability and Accountability Act (HIPAA).

HLTH 125 Survey of Medical Terminology (1)
1 hour lecture per week

Comment: Effective Fall 2019 HLTH 125 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 125 builds on knowledge of prefixes, suffixes, and word roots to analyze and build medical terms. It includes definition, spelling, and pronunciation of selected medical words dealing with all human body systems as well as surgical and diagnostic procedures, and disease conditions. Commonly used medical abbreviations and pharmacological terms as well as plural endings are also covered.

Upon successful completion of HLTH 125, the student should be able to:
1. Define, give examples of, and use correctly the following word parts used in building and analyzing medical terms: prefixes, suffixes, word roots, and combining forms.
2. Correctly use plural endings for medical terms.
3. Correctly define, spell, and correlate selected medical terms dealing with: 1. Body structure; 2. Anatomical planes and regions; 3. Blood and the immune system; 4. Cardiovascular and lymphatic systems; 5. Respiratory, digestive, urinary, and reproductive systems; 6. Musculoskeletal system; 7. Nervous system and psychological disorders; 8. Integumentary and endocrine systems.
4. Define and give examples of terminology used for surgical and diagnostic procedures and pathology.
5. Build medical terms by correctly putting word parts together.
6. Analyze the components of medical words and derive the meaning of the words.
7. State the meaning of common medical abbreviations and pharmacological terms.
8. Analyze and define terms dealing with various medical and dental specialties.

HLTH 160 Study of Diseases (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in BIOL 120 **or** a grade of "C" or higher in BIOL 130 **or** a grade of "C" or higher in both PHYL 141 and PHYL 142 **or** a grade of "C" or higher in both ZOOL 141 and ZOOL 142**; and** a grade of "C" or higher in HLTH 110 **or** a grade of "C" or higher in HLTH 125.*
Comment: Letter grade only. HLTH 160 may not be audited. HLTH 160 may not be taken credit/no credit. Effective Fall 2019 HLTH 160 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 160 covers basic concepts and characteristics of disease processes; etiology, methods of control, and development of selected diseases from each major body system.

Upon successful completion of HLTH 160, the student should be able to:
1. Identify and discuss basic concepts, principles, and characteristics of disease processes.
2. Recognize and apply terminology pertaining to injuries and disease processes.
3. Identify and discuss the etiology of selected diseases from each of the major body systems.
4. Identify and discuss methods of external control and treatment of known diseases.

HLTH 208 Soft Tissue Mobilization (1)
1 hour lecture per week

Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director; and a grade of "C" or higher in HLTH 290 and a grade of "C" or higher in HLTH 290L.
Recommended Preparation: HLTH 125.
Comment: Letter grade only. HLTH 208 may not be audited. HLTH 208 may not be taken credit/no credit.

HLTH 208 provides the basic knowledge and manual skills in therapeutic soft tissue mobilization techniques applicable in all body areas. HLTH 208 examines the different mediums used in therapeutic massage. This course also explores other selected soft tissue mobilization techniques for diversity and cultural appreciation.

Upon successful completion of HLTH 208, the student should be able to:
1. Describe indications for basic therapeutic massage techniques such as effleurage, petrissage and friction.
2. Identify the appropriate massage medium for the various soft tissue mobilization techniques and outcomes.
3. Recall, assess, and report indications and contraindications for soft tissue mobilization.
4. Define Universal/Standard precautions of the CDC.
5. Observe and monitor responses to positional changes, breathing patterns, thoracoabdominal movements, respiratory and circulatory changes affected by soft tissue mobilization.
6. Demonstrate problem-solving skills needed to address symptoms from activities, positions, postures, and soft tissue mobilization techniques that aggravate or relieve pain and sensation.

7. Define and distinguish normal and abnormal integumentary changes before, during and after a soft tissue mobilization treatment.
8. Identify normal and abnormal joint movements, muscle mass and tone.
9. Identify billing and reimbursement issues for soft tissue mobilization.

HLTH 208L Soft Tissue Mobilization Lab (1)
3 hours lab per week

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director; **and** a grade of "C" or higher in HLTH 290 and a grade of "C" or higher in HLTH 290L.*
Recommended Preparation: HLTH 125.
Comment: Letter grade only. HLTH 208L may not be audited. HLTH 208L may not be taken credit/no credit.

HLTH 208L provides the basic knowledge and manual skills in therapeutic soft tissue mobilization techniques applicable in all body areas. HLTH 208L examines the different mediums used in therapeutic massage. This course also explores other selected soft tissue mobilization techniques for diversity and cultural appreciation.

Upon successful completion of HLTH 160, the student should be able to:
1. Competently perform a basic soft tissue mobilization in an appropriately applied sequence of strokes such as effleurage, petrissage and friction.
2. Choose the appropriate massage medium for the various soft tissue mobilization techniques and outcomes.
3. Apply soft tissue mobilization techniques safely, effectively, efficiently and appropriately to body parts in relation to the desired physiological effects.
4. Recall, assess, and report indications and contraindications for soft tissue mobilization.
5. Demonstrate conduct that reflects the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy.
6. Define Universal/Standard precautions of the CDC.
7. Observe and monitor responses to positional changes, breathing patterns, thoracoabdominal movements, respiratory and circulatory changes affected by soft tissue mobilization.
8. Demonstrate problem-solving skills needed to address symptoms from activities, positions, postures, and soft tissue mobilization techniques that aggravate or relieve pain and sensation.
9. Define and distinguish normal and abnormal integumentary changes before, during and after a soft tissue mobilization treatment.
10. Identify normal and abnormal joint movements, muscle mass and tone.
11. Accomplish entry-level soft tissue mobilization technique skills for employment as documented on the clinical internship competency sheet.
12. Identify billing and reimbursement issues for soft tissue mobilization.
13. Demonstrate time management skills to function as an entry level PTA practitioner.
14. Locate the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.

HLTH 211 Therapeutic Exercise (1.5)
1.5 hours lecture per week

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director **and** a grade of "C" or higher in HLTH 290 **and** a grade of "C" or higher in HLTH 290L.*
Comment: Letter grade only. HLTH 211 may not be audited. HLTH 211 may not be taken credit/no credit.

HLTH 211 presents the basic principles and clinical application of therapeutic exercise and the body's response to exercise in both normal and pathological states. It will introduce the concepts of passive, assisted and active range of motion, isometric, concentric, eccentric, progressive resisted exercise, neuromuscular facilitation/inhibition and isokinetic exercise. Indications and contraindiction to exercise in the fitness and wellness settings, acute, sub acute and chronic stages of healing will be included. Use of lab simulation and role playing of actual clinical situations will develop the student's ability to problem solve, think analytically and modify exercise programs as they relate to the conditions presented and the observed

physiologic responses. The use of appropriate communication skills, the ability to progress exercise programs and follow the treatment plans will be stressed.

Upon successful completion of HLTH 211, the student should be able to:
1. Describe the basic concepts of Range of Motion (ROM) and stretching exercises to include end-feel, resting length and stretch.
2. Describe the basic concepts of Progressive Resisted Exercises (PREs) to include strength, power and endurance using among others DeLorne, Oxford and Daily Adjustable Progressive Resistance Exercise (DAPRE) principles.
3. Describe the basic concepts of aqua therapy as it applies to the rehab population.
4. Describe and perform the basic concepts and skills of functional activity as it applies to the rehab population to include neuromuscular facilitation and inhibition techniques, trunk stabilization, posture and back care.
5. Identify and discuss the effects of chronic abnormal pathology and pain on the musculoskeletal system as it applies to the performance of exercise and function.
6. Identify kinesiology concepts and principles of exercise intervention techniques.
7. Design and implement specific exercise programs and progressions to address goals of treatment as indicated in a treatment plans.
8. Analyze exercise programs for their efficacy and appropriateness for ROM, strength, endurance and flexibility.
9. Explain competent use of various types of therapeutic exercise supplies and equipment such as Theraband, free weights, pulley systems, exercise equipment, wands, isokinetic equipment.
10. Describe safety factors, indications, contraindications, precautions, and appropriate progression suggestions for presented exercise interventions simulations.
11. Use problem solving and analytical thinking skills, to modify exercise parameters as they relate to observed patient responses and conditions presented.
12. Recognize the physiological effects of the applied exercise techniques.
13. Document accurately the exercise programs created using approved terminology presented in the course.

HLTH 211L Therapeutic Exercise Lab (1.5)
4.5hours lab per week

Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director; and a grade of "C" or higher in HLTH 290 and a grade of "C" of higher in HLTH 290L.
Comment: Letter grade only. HLTH 211L may not be audited. HLTH 211L may not be taken credit/no credit.

HLTH 211L presents the basic principles and clinical application of therapeutic exercise and the body's response to exercise in both normal and pathological states. It will introduce the concepts of passive, assisted and active range of motion, isometric, concentric, eccentric, progressive resisted exercise, neuromuscular facilitation/inhibition and isokinetic exercise. Indications and contraindication to exercise in the fitness and wellness settings, acute, sub acute and chronic stages of healing will be included. Use of lab simulation and role playing of actual clinical situations will develop the student's ability to problem solve, think analytically and modify exercise programs as they relate to the conditions presented and the observed physiologic responses. The use of appropriate communication skills, the ability to progress exercise programs and follow the treatment plans will be stressed.

Upon successful completion of HLTH 211L, the student should be able to:
1. Describe the basic concepts of Range of Motion (ROM) and stretching exercises to include end-feel, resting length and stretch.
2. Describe the basic concepts of Progressive Resisted Exercises (PREs) to include strength, power and endurance using among others DeLorne, Oxford and Daily Adjustable Progressive Resistance Exercise (DAPRE) principles.
3. Describe the basic concepts of aqua therapy as it applies to the rehab population.
4. Describe and perform the basic concepts and skills of functional activity as it applies to the rehab population to include neuromuscular facilitation and inhibition techniques, trunk stabilization, posture and back care
5. Identify and discuss the effects of chronic abnormal pathology and pain on the musculoskeletal system as it applies to the performance of exercise and function.
6. Use kinesiology concepts and principles of exercise intervention techniques.
7. Design and implement specific exercise programs and progressions to address goals of treatment as indicated in a treatment plans.

8. Analyze exercise programs for their efficacy and appropriateness for ROM, strength, endurance and flexibility.
9. Demonstrate competency in the presented therapeutic exercises applications. Exercise interventions may include ROM, Stretching, Strengthening, PREs, Aerobic, Endurance, Neuromuscular facilitation and inhibition and Functional activities.
10. Explain and demonstrate competent use of various types of therapeutic exercise supplies and equipment such as Theraband, free weights, pulley systems, exercise equipment, wands, isokinetic equipment.
11. Apply safety factors, indications, contraindications, precautions, and appropriate progression suggestions for presented exercise interventions simulations.
12. Use problem solving and analytical thinking skills, to modify exercise parameters as they relate to observed patient responses and conditions presented.
13. Recognize the physiological effects of the applied exercise techniques
14. Explain and execute an exercise program to simulated patient and family scenarios in a professional and acceptable manner being sensitive to ethical and cultural issues.
15. Document accurately the exercise programs created using approved terminology presented in the course.

HLTH 212 Transfers, Positioning, Mobility and Assistive Devices (1)
1 hour lecture per week

Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.
Comment: Letter grade only. HLTH 212 may not be audited. HLTH 212 may not be taken credit/no credit.

HLTH 212 provides the basic standard patient care skills and training in the use of wheelchairs, ambulatory aids, selected hospital equipment, transfers, and environmental assessment.

Upon successful completion of HLTH 212, the student should be able to:
1. Identify and assess architectural barriers to mobility.
2. Communicate data and information from PT interventions in written documentation with the patient, family, significant other, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
3. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services..
4. Describe interventions in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, member of the physical therapy profession, and other providers as necessary.
5. Apply problem-solving knowledge to address symptoms aggravated by activities such as respiratory and circulatory changes.
6. Identify the individual's or care giver's ability to care for wheelchair, assistive, adaptive, and supportive devices in a safe manner.
7. Describe procedures for skin condition assessments before, during and after removal of external support devices such as wheelchair fitting, assistive and supportive devices.
8. Explain progressions of ambulation, mobility and wheelchair management and balance.
9. Communicate architectural barriers in the home or community with the patient, family, significant other, PT, health care providers and others.
10. Assess and communicate contraindications, precautions, and interventions   within the plan of care in response to the patient's clinical indications to the supervising PT.
11. Report and communicate contraindications, precautions and changes of any PT intervention to the supervising PT.
12. Explain when an intervention is outside the scope of PTA practice.
13. Describe appropriate action and behavior in emergency situations.
14. Identify appropriate standardized questionnaires, graphs, behavioral scales, or
     visual analog scales for pain and document results.

HLTH 212L Transfers, Positioning, Mobility and Assistive Devices Lab (1)
3 hours lab per week

Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.
Comment: Letter grade only. HLTH 212L may not be audited. HLTH 212L may not be taken credit/no credit.

HLTH 212L provides the basic standard patient care skills and training in the use of wheelchairs, ambulatory aids, selected hospital equipment, transfers, and environmental assessment.

Upon successful completion of HLTH 212L, the student should be able to:
1. Identify and assess architectural barriers to mobility.
2. Communicate data and information from PT interventions in written documentation with the patient, family, significant other, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
3. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
4. Implement safe, effective and efficient competencies in selected components of PT interventions identified in the plan of care: Activities of daily living, assistive/adaptive devices, transfer skills - bed, chairs, automobile, bathroom, body mechanics, gait and locomotion training, wheelchair management skills, lifts, balance and coordination with and without assistive devices
5. Apply problem-solving knowledge to address symptoms aggravated by activities such as respiratory and circulatory changes.
6. Measure and document patient height and weight.
7. Identify the individual's or care giver's ability to care for wheelchair, assistive, adaptive, and supportive devices in a safe manner.
8. Assess skin condition before, during and after removal of external support devices such as wheelchair fitting, assistive and supportive devices.
9. Explain and implement progression or status change with ambulation, mobility and wheelchair management status and balance.
10. Demonstrate activities by using comparison and contrasting situations, positions and postures that aggravate or relieve pain or skin sensation.
11. Communicate architectural barriers in the home or community with the patient, family, significant other, PT, health care providers and others.
12. Assess and communicate contraindications, precautions, and interventions within the plan of care in response to the patient's clinical indications to the supervising PT.
13. Report and communicate contraindications, precautions and changes of any PT intervention to the supervising PT.
14. Explain when an intervention is outside the scope of PTA practice.
15. Instruct patient, family members, significant others, care givers, and others of the plan of care and treatment regimens to enhance the rehabilitation process.
16. Demonstrate appropriate action and behavior in emergency situations.
17. Demonstrate knowledge of OSHA regulations.
18. Identify the personal responsibility for career development, patient advocacy, life- long learning and membership in the professional association by reading, locating and interpreting health care literature, documents or Internet information.
19. Recognize and monitor patient responses to positional changes and activities.
20. Administer standardized questionnaires, graphs, behavioral scales, or visual analog scales for pain and document results.

HLTH 250 Basic Cardiac Arrhythmias (3) Fall
3 hours lecture per week or
A total of 45 hours in a one-week module

*Prerequisite(s): A grade of "C" or higher in BIOL 130 **or** a grade of "C" or higher in both PHYL 141 and PHYL 142 **or** a grade of "C" or higher in both ZOOL 141 and ZOOL 142 **or** a grade of "C" or higher in a higher-level human anatomy and physiology course **or** acceptance into the Certificate of Achievement in Medical Assisting program **or** acceptance into the Associate in Science degree in Medical Assisting program **or** consent of instructor.*

Comment: Letter grade only. HLTH 250 may not be audited. HLTH 250 may not be taken credit/no credit. HLTH 250 is offered in the fall semester only. Effective Fall 2019 HLTH 250 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 250 presents a survey of cardiac anatomy and function, electrophysiological properties of the heart, common rhythms and arrhythmias.

Upon successful completion of HLTH 250, the student should be able to:
1. Describe and diagram the electrical conduction system of the heart.
2. Identify and measure waves, intervals, rhythms and rates.
3. Identify and describe the sinus rhythms with and without atrial arrhythmias.

4. Define and identify fibrillation and cardioversion.
5. Define junctional rhythm and identify junctional arrhythmias.
6. Analyze and classify supraventricular tracings by specific names.
7. Identify atrioventricular (AV) blocks and bundle branch blocks and list common causes.
8. Diagnose active and passive ventricular arrhythmias, assess effect on cardiac output, and describe appropriate clinical response.
9. Describe and identify artificial pacemakers and their rhythms.
10. Interpret mixed tracings.

HLTH 252 Pathophysiology (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in BIOL 130 **or** a grade of "C" or higher in both PHYL 141 and PHYL 142 **or** a grade of "C" or higher in both ZOOL 141 and ZOOL 142 **or** a grade of "C" or higher in an equivalent course **or** a grade of "C" or higher in a higher-level human anatomy and physiology course**; and** a grade of "C" or higher in HLTH 110 **or** a grade of "C" or higher in HLTH 125**; and** a grade of "C" or higher in HLTH 160**; and** a grade of "C" or higher in PHRM 110 **or** a grade of "C" or higher in PHRM 203**; and** acceptance into the Certificate of Achievement in Medical Assisting program **or** acceptance into the Associate in Science degree in Medical Assisting program. Prerequisites may be waived by the consent of instructor.*
Comment: Letter grade only. HLTH 252 may not be audited. HLTH 252 may not be taken credit/no credit. Effective Fall 2019 HLTH 252 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 252 is a clinical case study approach to the study of underlying principles, manifestations, and clinical implications of disease processes and alterations of functions in body systems in all age groups.

Upon successful completion of HLTH 252, the student should be able to:
1. Describe:
   a. Structural and functional reactions of cells and tissues to injurious agents;
   b. Neurology dysfunction and alterations of neurologic function in adults and children;
   c. Alterations of hematologic functions in adults and children;
   d. Clinical implications of respiratory diseases in adults and children; and
   e. Disorders of the musculoskeletal system in adults and children.
2. Describe genetic and environmental factors causing disease.
3. Explain the body's normal and altered responses to disease processes.
4. Identify disorders of organs and systems in clinical case studies.
5. Compare clinical manifestations and treatment of cancer in children and adults to clinical cases.
6. Explain manifestations and control of alterations of hormonal regulation in adults and children.
7. Identify specific disorders and their etiologic agents and effects.
8. Describe types of alterations of cardiovascular function and effects in adults and children.
9. Explain various disorders of the urinary system in terms of structure and function.

10. Identify alterations of digestive function in adults and children and compare them to clinical cases.
11. Describe alterations and disorders of the integument in adults and children.

HLTH 270 Aging and Rehabilitation (1)
1 hour lecture per week

*Prerequisite(s): A grade of "C" or higher or concurrent enrollment in PHYL 141 **or** a grade of "C" or higher in ZOOL 141 **or** a grade of "C" or higher or concurrent enrollment in BIOL 130 **or** a grade of "C" or higher or concurrent enrollment in an equivalent course **or** consent of Program Director.*
Comment: Letter grade only. HLTH 270 may not be audited. HLTH 270 may not be taken credit/no credit. A service-learning project is highly recommended in this course. Effective Fall 2019 HLTH 270 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 270 provides a basic overview of the aging process, age related conditions, psychosocial issues on aging, other age-related topics and reimbursement issues. The course also discusses the current trend of the aging population and quality of life issues.

Upon successful completion of HLTH 270, the student should be able to:
1. Identify the normal and abnormal changes with aging.
2. Discuss introductory concepts of geriatrics and gerontology.
3. Identify pathological changes with aging and the caregiver role in this process.
4. Discuss issues in health care and rehabilitation associated with aging.
5. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
6. Define psychosocial and reimbursement issues facing the elderly population.
7. Effectively explain the purpose of physical therapy to clients, community and others.
8. Effectively distinguish the scope of practice between the various health care services.
9. Read, locate and interpret health care literature, documents or Internet information.
10. State and recognize ethical and professional conduct in health care.

HLTH 280 Disease and Disability for Rehabilitation (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in BIOL 130 **or** a grade of "C" or higher in PHYL 141 **or** a grade of "C" or higher in ZOOL 141 **or** a grade of "C" or higher in an equivalent course **or** a grade of "C" or higher in a higher-level human anatomy and physiology course.*
*Recommended Preparation: BIOL 130L **or** PHYL 141L **or** ZOOL 141L.*
Comment: Letter grade only. HLTH 280 may not be audited. HLTH 280 may not be taken credit/no credit. Effective Fall 2019 HLTH 280 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 280 investigates the study of disease and disability in the human body with emphasis on conditions commonly treated in physical therapy and other rehabilitation services. This course includes a brief review of the structures and function of the organ systems in relation to the specific pathology. The etiology, pathogenesis, clinical manifestations, prognosis, and clinical management of diseases and disabilities will be presented. HLTH 280 also focuses on the relationship of the neuromusculoskeletal system to all pathology of the human body. Discussions of physical therapy interventions and other rehabilitation services as appropriate for Physical Therapist Assistants (PTAs) and others in the patient's care are explored.

Upon successful completion of HLTH 280, the student should be able to:
1. Identify the general causes and processes of disease and disability in relation to the human body systems.
2. Discuss the clinical course, mechanism, and medical management of injuries and possible interventions for commonly seen diagnoses of the human body adhering to the sensitivity of ethnicity and cultural issues.

3. Identify the benefits of rehabilitation in the treatment of various medical conditions and trauma with a focus on neuromusculoskeletal conditions such as the selected pathologies of the spine, related soft tissues and the joints of the body.
4. Identify the relationship and role of the following organ systems to each other in selected trauma and medical conditions: integumentary, musculoskeletal, cardiopulmonary, neurological, psychological, genitourinary, gastrointestinal, obstetrics, pediatrics.
5. Discriminate between cardiac conditions and cardiopulmonary disorders such as myocardial infarction, angina, CHF, tuberculosis, COPD and respiratory failure.
6. Define oncology, metabolic disorders such as diabetes and chronic fatigue syndrome, blood borne pathogens such as HIV, AIDS, hemophilia and other infectious diseases.
7. Identify pharmaceutical treatments for conditions presented in the course.
8. State the psychological components affecting rehabilitation to include: schizophrenia, paranoia, depression, bipolar disorder, defense mechanisms, death and dying, stages of adjustment to disability.

HLTH 290 Kinesiology (2)
2 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in BIOL 130 **or** a grade of "C" or higher in PHYL 141 **or** a grade of "C" or higher in ZOOL 141 **or** a grade of "C" or higher in a higher-level human anatomy and physiology course.*
Corequisite(s): HLTH 290L.
Recommended Preparation: PHYS 100 or PHYS 122.
Comment: Letter grade only. HLTH 290 may not be audited. HLTH 290 may not be taken credit/no credit. Effective Fall 2019 HLTH 290 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 290 explains the principles of kinesiology. It emphasizes the relationship of the musculoskeletal system, body mechanics, postural alignment, biomechanical principles and the nervous system to kinesiology principles for the PTA, OTA, and ESS majors. The student will be required to apply these principles in the companion course, HLTH 290L.

Upon successful completion of HLTH 290, the student should be able to:
1. Classify the joints of the body according to structure and explain the relationship between the structure and capacity for movement contributing to joint range of motion and stability.
2. Identify the structure and properties for skeletal muscles presented in this course in terms of the proximal and distal attachments, peripheral innervations, actions and lever class.
3. Classify skeletal muscle in terms of fiber arrangement as strap, rhomboidal, fusiform, triangular, unipennate, bipennate, multipennate, and relate it to its function.
4. State and group skeletal muscles and bony landmarks by body sections.
5. Define and explain kinesiology using the concepts of the orientation planes of the body and the axes of motion in relationship to the movements of the extremities and trunk and its importance to movement and activities.
6. Identify the concepts and principles of body mechanics related to postural alignment and assessment.
7. Name and identify types of muscle contraction as: concentric, eccentric, static, isometric, isotonic, isokinetic, and length-tension relationship.
8. Explain the muscle function for the muscles presented in the course in terms of prime mover, agonist, antagonist, synergist and stabilizer.
9. Identify the phases of gait and balance.
10. Demonstrate fluency in kinesiology and rehabilitation terminology and layman's terms.

HLTH 290L Kinesiology Lab (1)
4 hours lab per week

*Prerequisite(s): A grade of "C" or higher in BIOL 130L **or** a grade of "C" or higher in PHYL 141L **or** a grade of "C" or higher in ZOOL 141L **or** a grade of "C" or higher in higher -level human anatomy and physiology laboratory course.*
Corequisite(s): HLTH 290.
*Recommended Preparation: PHYS 100L **or** PHYS 122L.*
Comment: Letter grade only. HLTH 290L may not be audited. HLTH 290L may not be taken credit/no credit. Effective Fall 2019 HLTH 290L has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HLTH 290L provides the application of kinesiological principles. Activities in body mechanics, postural alignment, musculoskeletal system function, and gait patterns will be performed. Students are required to apply biomechanical and kinesiological principles as they relate to the job performance of the PTA, OTA, or ESS majors. Students are required to apply and correlate the principles from HLTH 290 in their lab assignments and activities.

Upon successful completion of HLTH 290L, the student should be able to:
1. Identify and locate the proximal and distal attachments, peripheral innervations, musculoskeletal actions, and lever class for the skeletal muscles on the human body included in this course according to fiber arrangement, and relate it to its function.
2. Identify and locate the joints of the body according to structure and explain the relationship between the structure and capacity for movement contributing to joint ROM and stability.
3. Describe and perform movements in the extremities and trunk in terms of joint structure, axes of motion, muscle contractions and interactions such as the length- tension relationship, concentric, eccentric, static, isometric, isotonic, and isokinetic.
4. Identify and demonstrate muscle action as prime mover, agonist, antagonist, synergist and stabilizer, as it relates to the concepts and principles of body mechanics, postural alignment, and the purpose of assessment.
5. Distinguish the presence or absence of muscle mass and tone.
6. Observe and palpate the musculoskeletal anatomy presented in lab such as bony prominences, muscles, tendons, ligaments, associated postures and gait variations.
7. Construct mechanical principles in terms of human movement including normal gait patterns and vicarious motions to comprehend biomechanical response motion to pathology.
8. Demonstrate fluency in kinesiology and rehabilitation terminology and layman's terms.

HISTORY

HIST 151 World History to 1500 (3) KCC AA/FGA and KCC AS/AH
3 hours lecture per week

HIST 151 is a global and historical survey focusing on human societies and cross-cultural interactions to 1500 C.E. It examines the events, personalities, institutions, and ideas that shaped the major world societies.

Upon successful completion of HIST 151, the student should be able to:
1. Explain the role and importance of notable individuals in history.
2. Interpret a significant global process with respect to social, religious, political, economic, and/or technological forces among the various civilizations.
3. Compare the ethics and traditions of peoples in history in relation to one's own life and/or culture.

HIST 152 World History since 1500 (3) KCC AA/FGB and KCC AS/AH
3 hours lecture per week

HIST 152 is a global and historical survey focusing on human societies and cross-cultural interactions since 1500 C.E. It examines the events, personalities, institutions, and ideas that shaped the modern world.

Upon successful completion of HIST 152, the student should be able to:
1. Explain the role and importance of notable individuals in history.
2. Interpret a significant global process with respect to social, religious, political, economic, and/or technological forces among the various civilizations.
3. Compare the ethics and traditions of peoples in history in relation to one's own life and/or culture.

HIST 231 Modern European Civilization I (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ENG 100 **or** a grade of "C" or higher in ESL 100.*

HIST 231 is a survey of the political evolution and major economic, social and cultural development of European States, 1500-1800.

Upon successful completion of HIST 231, the student should be able to:
1. Identify and explain the role of important individuals, events and concepts in modern European history.
2. Examine cause and effect relationships in modern European history, while demonstrating a sense of chronology.
3. Describe and analyze the ideologies and processes that shaped modern Europe (e.g capitalism and industrialization; liberalism and democracy; nationalism and nation states; cross-cultural interactions; imperialism and colonialism; fascism; militarism and warfare).
4. Analyze and integrate primary source materials into a more developed historical understanding.

HIST 232 Modern European Civilization II (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ENG 100 **or** a grade of "C" or higher in ESL 100.*
Recommended Preparation: HIST 152.

HIST 232 is a continuation of HIST 231. It is a survey of the political evolution and major economic, social and cultural development of European states from Napoleon (1800s) to the present.

Upon successful completion of HIST 232, the student should be able to:
1. Identify and explain the role of important individuals, events and concepts in modern European history.
2. Examine cause and effect relationships in modern European history, while demonstrating a sense of chronology.
3. Describe and analyze the ideologies and processes that shaped modern Europe (e.g capitalism and industrialization; liberalism and democracy; nationalism and nation states; cross-cultural interactions; imperialism and colonialism; fascism; militarism and warfare).
4. Analyze and integrate primary source materials into a more developed historical understanding.

HIST 241 Civilizations of Asia I (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): ENG 100 **or** ESL 100.*
Recommended Preparation: HIST 151.

HIST 241 is a survey of the major civilizations of East Asia, South Asia, and Southeast Asia from prehistoric times to 1500 AD.

Upon successful completion of HIST 241, the student should be able to:
1. Analyze the role and importance of individuals in Asian history.
2. Describe historical processes and their significance in Asia (e.g. agriculture, unification, empire building, statecraft, philosophy, art, religion, etc.).
3. Analyze cross-cultural interactions among the various people of Asia and describe the impact of such encounters.
4. Examine one's own values through engaging ethical questions and issues in the context of Asian history.

HIST 242 Civilizations of Asia II (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): ENG 100 **or** ESL 100.*
Recommended Preparation: HIST 152.

HIST 242 is a continuation of HIST 241. It surveys South, Southeast, and East Asian civilizations from 1500 to the present.

Upon successful completion of HIST 242, the student should be able to:
1. Analyze the role and importance of individuals in modern Asian history.
2. Describe historical processes and their significance in Asia (e.g. technological breakthroughs, foreign encounters, industrialization, imperialism and colonialism, socialism, capitalism, environmentalism, etc.).
3. Analyze the impact of European and American encounters with the peoples and cultures of Asia, evaluating the reactions, responses, results, and affect on Asian national identities as well as Asia's place in the global community.
4. Examine one's own values through engaging ethical questions and issues in the context of modern Asian history.
5. Identify and evaluate the major challenges Asia faces in the 21st century.

HIST 281 Introduction to American History I (3) KCC AA/DH and KCC AS/AH Fall
3 hours lecture per week

*Prerequisite(s): Qualification for ENG 100 **or** qualification for ESL 100.*
Comment: HIST 281 is offered in the fall semester only.

HIST 281 is an interpretive survey of United States history covering the major social, political, economic and cultural developments from European settlement to Reconstruction.

Upon successful completion of HIST 281, the student should be able to:
1. Describe and explain the impact of the arrival of the Europeans and evaluate the political, environmental and social effects created by the interaction of the two worlds.
2. Chart the major political, social and economic issues contributing to the transition of the British colonies from colonial possessions to an independent nation.
3. Examine the development of the American system of government and the American party system and discuss its significance in national and world history.
4. Describe the social, political and economic impact of slavery on American history.

HIST 282 Introduction to US History II: US History since 1865 (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

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

HIST 282 is a survey of American history from Reconstruction to the present, covering the rise of the United States as an economic power up through its role as the world hegemon.

Upon successful completion of HIST 282, the student should be able to:
1. Discuss the development and beliefs of American political, economic, social, and cultural movements.
2. Analyze the industrial revolution in America and be able to identify the cultural, technological, social, and political changes that accompanied this major shift in the American mode of production.
3. Examine the emergence of the United States first as an imperial power and later as one of the world's superpowers and explain U.S. foreign policy goals as they evolved in the 20th century.
4. Identify the role of the U.S. in the post-cold war world as a means of demonstrating an understanding of events in the contemporary world.
5. Elaborate on the development and value of diversity in American society describing the contributions of a variety of ethnic and racial groups that have served to shape and expand the worldview of the American people.

HIST 284 History of the Hawaiian Islands (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ENG 100 **or** a grade of "C" or higher in ESL 100.*
*Recommended Preparation: HIST 152 **or** HAW 101 **or** HWST 100 **or** HWST 107.*

HIST 284 will survey the origins and evolution of ancient Hawaiian society and culture, the changes during the monarchial period, and the transformation of Hawaiʻi in the 20th century.

Upon successful completion of HIST 284, the student should be able to:
1. Analyze the role and importance of individuals in Hawaiian History.
2. Analyze past events in Hawaiian history by using multiple sources, understanding historical context, and evaluating impact over time.
3. Describe the social, religious, political, and economic changes in Hawaiʻi from the late 18th century through the 20th century.
4. Trace the development of Hawaiʻi's multi-cultural society and explain its enduring influences in our modern times.
5. Examine the values and cultural traditions of Native Hawaiians in relation to one's own values and culture.

HIST 288 History of the Pacific Islands (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ENG 100 **or** a grade of "C" or higher in ESL 100.*
*Recommended Preparation: HIST 151 **or** HIST 152 **or** PACS 108.*

HIST 288 is a survey introduction of Pacific Islands history that traces events from first settlement to modern times.

Upon successful completion of HIST 288, the student should be able to:
1. Analyze the role and importance of individuals in Pacific Islands history.
2. Analyze past events in Pacific Islands history by using multiple sources, understanding historical context, and evaluating impact over time.
3. Compare the social, religious, political, and economic changes of various Pacific Islands from first contact through modern times.
4. Examine the values and cultural traditions of Pacific islanders in relation to one's own values and culture.

HONORS

Honors sections of courses (3)
3 hours lecture per week, identical to the regular courses

Prerequisite(s): Acceptance into the Honors program.

Honors sections of courses are special sections of required general education/area requirement courses for qualified honor students. The honors section course description is identical to that of the general education course. To distinguish it from the regular course, the class section will have the word "Honors" before the course title. One or more honors section courses may be offered each semester and the courses would be offered in the general education/area requirements for the AA and AS degrees. An addendum to the existing general education course outline will be reviewed and approved by the Honors Advisory Committee.

Upon successful completion of an Honors section, the student should be able to:
1. Demonstrate ability to think and read critically by: distinguishing between verifiable facts and value claims; determining the reliability of a claim or source; determining the accuracy of a statement; distinguishing between warranted and unwarranted claims; distinguishing relevant from irrelevant information, claims or reasons; detecting bias; identifying unstated and stated assumptions; identifying ambiguous or equivocal claims or arguments;

recognizing inconsistencies in logical reasoning; determining the strength of an argument; evaluating and utilizing knowledge to form valid conclusions and solutions.

2. Develop communication (written and oral) abilities in both individual and group situations by: showing capacity to communicate either in a formal speech or in interpersonal discussion with appropriate diction, choice of ideas and information, and organization; learning to listen, communicate and tolerate opposing viewpoints; communicating effectively within the context of the seminar; for example, writing effectively, expressing one's opinions and be able to express the opinions of others; analyzing research topics and researching primary resource materials; leading a seminar, if required, presenting an assigned topic, which one has researched and organized as well as execute cogent oral presentations; exhibiting skills in critical analysis and persuasive discussion, arriving at possible solutions and establishing a viewpoint that is defensible as evidence accumulates; demonstrating thinking that is clear, constructive and critical in writing and speaking.

3. Exhibit decision-making skills and abilities by: defining a goal; identifying obstacles to achieving the goal; identifying alternatives; analyzing alternatives; ranking alternatives; choosing the "best" alternative; implementing decision; evaluating results.

4. Exhibit the ability to learn in both independent and cooperative activities by studying independently and cooperatively with the guidance of the instructor.

5. Begin to develop skills for lifelong learning by: exhibiting a value for continuous inquiry by voluntary participation in small group discussions or additional voluntary reading; taking personal responsibility for one's own creations, assertions, decisions, and values; illustrating growth toward a self-concept and confidence in expression in written and spoken form; displaying a sense of self direction in the pursuit of knowledge and ideas.

6. Exhibit problem solving skills and abilities by: defining the problem, formulating hypotheses, testing hypotheses, drawing conclusions about hypotheses, interpreting findings.

7. Examine values and value systems (one's own and others) by: relating values of others to one's own personal belief system; understanding the effect of technology, science and the dynamics of contemporary life on the quality of life; recognizing the commonality, interrelatedness, tensions and affirmations of human existence.

HOSPITALITY and TOURISM

HOST 100 Career and Customer Service Skills (3)
2 hours lecture,
2 hours lecture/lab per week

*Recommended Preparation: ENG 100 **or** ESL 100.*
Comment: Effective Fall 2019 HOST 100 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 100 focuses on the strategies and skills related to career success and customer satisfaction in the Hospitality and Tourism industry.

Upon successful completion of HOST 100, the student should be able to:
1. Create a career path to meet individual goals.
2. Apply job search strategies and techniques applicable to the hospitality and tourism industry and other related pathways.
3. Develop strategies that enhance guest satisfaction, exceed expectations, win loyalty and address service recovery in the hospitality and tourism industry.
4. Demonstrate professionalism, business etiquette, ethical and value-based behaviors.

HOST 101 Introduction to Hospitality and Tourism (3)
3 hours lecture per week

Comment: Effective Fall 2019 HOST 101 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 101 provides an overview of the travel industry and related major business components. Students will analyze the links between travel, lodging, food, recreation, and other tourism-related industries.

Upon successful completion of HOST 101, the student should be able to:
1. Distinguish the organizations, operational characteristics and interrelationships of the sectors of the hospitality and tourism industry (travel/tourism, lodging, food/beverage, recreation, and events).
2. Explain historical events, current trends and sustainable practices (social, economic, cultural, and/or environment) in the hospitality and tourism industry.
3. Identify the career opportunities, job qualifications, and benefits provided by the various sectors of the hospitality and tourism industry.
4. Differentiate the products, services, and systems that influence leisure and business travel to a destination.

HOST 150 Housekeeping Operations (3)
3 hours lecture per week

Recommended Preparation: HOST 101.
Comment: Effective Fall 2019 HOST 150 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 150 studies the professional management of housekeeping operations including practical applications and management skills required to ensure quality service and effective performance.

Upon successful completion of HOST 150, the student should be able to:
1. Identify and critique the responsibilities and functions of housekeeping operations and analyze the importance of inter/intra departmental relationships and Hawaiian/host culture values.
2. Develop and demonstrate safe, effective, efficient and sustainable practices related to various housekeeping tasks and operational responsibilities.
3. Analyze the management functions of housekeeping operations including planning, organizing, staffing, controlling and evaluating techniques required to ensure quality service, efficient productivity and effective performance.

HOST 154 Food and Beverage Operations (3)
3 hours lecture per week

Recommended Preparation: HOST 101.
Comment: Effective Fall 2019 HOST 154 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 154 introduces the basic principles of marketing, menu planning, service styles, nutrition, sanitation and safety, purchasing, and control systems as they apply to food and beverage management in an operational setting. Provides practical applications for effectively managing resources for food and beverage industry operations.

Upon successful completion of HOST 154, the student should be able to:
1. Recognize the responsibilities involved in successfully managing and marketing various food and beverage operations.
2. Evaluate effective practices and trends as they relate to nutrition, menu planning, purchasing, pricing, preparation, and production.
3. Demonstrate applicable service, sanitation, and safety skills to improve employee performance and enhance guest satisfaction.
4. Determine the components involved in the financial management of food and beverage operations to promote fiscal success.

HOST 156 Front Office Management (4)
3 hours lecture, 2 hours lecture/lab per week

Comment: Effective Fall 2019 HOST 156 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 156 is the study of the philosophy, theory, and current operating procedures of a hotel front office. Concentrates on the human relation skills necessary for effective guest and employee relations and the technical skills necessary to operate a manual, mechanical, or computerized front office operation. Focuses on managerial analysis of processes, outcomes and efficiencies.

Upon successful completion of HOST 156, the student should be able to:
1. Distinguish and connect the various classifications of lodging operations to work effectively in a front office environment.
2. Perform each of the major front office functions following industry regulations to facilitate transition into a lodging front office environment.
3. Interpret statistical information that affects lodging operations.
4. Identify the personal attitudes, characteristics, and work practices essential in providing excellence in front office guest service.
5. Demonstrate effective guest service and complaint handling techniques.
6. Demonstrate computer proficiency in reservations, check-in, posting, and check- out functions of the Front Office.
7. Demonstrate accurate application of guest accounting procedures.
8. Produce and analyze management reports.
9. Analyze managerial responses to a variety of guest situations.
10. Perform a managerial review and audit of operational functions

HOST 168 Tour Operations Management (3)
3 hours lecture per week

Comment: Effective Fall 2019 HOST 168 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 168 is designed to prepare students for a career in tour operations. This course will expose the students to the operational aspects of a tour company and the skills that enable students to create, market, sell and guide a tour. Students will deliver sight specific information in an accurate and engaging fashion using Hawai`i as a destination and the foundation of this course.

Upon successful completion of HOST 168, the student should be able to:
1. Apply the traits and skills needed to be a successful tour leader.
2. Analyze the importance of the various components of a tour to assure that guest expectations and reservation arrangements are met.
3. Provide interesting and accurate information about the language, history, culture and sites of Hawai`i.
4. Demonstrate the ability to conduct walking and bus tours.
5. Describe the importance of the sustainability of culture to a destination and the tourism industry.
6. Create, market and sell a guided tour.
7. Discuss the operational aspects of a successful tour company.

HOST 170 Selling Destinations (3)
3 hours lecture per week

Comment: HOST 171 is offered in the Fall and Spring semesters only. Effective Fall 2019 HOST 170 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 170 is designed to familiarize students with major worldwide tourist destinations with added emphasis on Hawai'i as a destination.

Upon successful completion of HOST 170, the student should be able to:
1. Discuss the factors that motivate travelers to visit major travel destinations worldwide, and be able to describe their uniqueness when selling travel.
2. Describe Hawaiʻi's uniqueness and recommend the latest and greatest events and attractions of each of the Islands.
3. Identify the capitals, major tourist attractions, major cities, airports, major airlines, methods of transportation, weather patterns, currency, lodging options and history of many countries.
4. Interpret the cultural patterns unique to Hawaiʻi and other major destinations.
5. Demonstrate the importance of ecotourism, especially in caring for all natural and cultural tourism attractions of the world.
6. Analyze the economic impact of the tourism industry to many worldwide destinations.

HOST 171 Airline Reservations and Pricing (4)
3 hours lecture
2 hours lecture/lab per week

Comment: HOST 171 is offered in the Fall and Spring semesters only. Effective Fall 2019 HOST 171 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 171 prepares students with the knowledge and skills needed to create domestic and international air itineraries in a Global Distribution System (GDS). Students will build Passenger Name Records (PNR), price itineraries, interpret tariff rules, and create advanced passenger needs requests, in the "live" TravelPort System.

Upon successful completion of HOST 171, the student should be able to:
1. Define and create types of air journeys (one-way, round trip, circle trip, and open jaw) and types of flight services (direct, non-stop, connecting) to create travel itineraries.
2. Evaluate fare basis codes and fare rules, including international fares based on neutral units of construction principles.
3. Identify and construct airline reservations using the mandatory fields of the Passenger Name Records (PNR).
4. Critique how the United States airline industry compares to the International Air Transportation Association regulations.
5. Research visa and health requirements using TIMATIC (an electronic version of the Travel Information Manual).
6. Create advanced requests to a PNR to better meet passenger needs and special requests.

HOST 259 Tourism Marketing (4)
3 hours lecture
2 hours lecture/lab per week

Prerequisite(s): A grade of "C" or higher in HOST 101.
Recommended Preparation: A grade of "C" or higher in four Hospitality major courses. Comment: Effective Fall 2019 HOST 259 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 259 is a study of modern marketing techniques and concepts for the tourism industry that focuses on the unique challenges inherent in the production and marketing of intangible products and services. Tourism Marketing will explore each phase of a marketing plan to involve students in the application of topics such as: macro- environmental trends, consumer behavior, brand development, pricing approaches, and promotional strategies.

Upon successful completion of HOST 259, the student should be able to:
1. Explain what marketing is and why marketing should be viewed as a philosophy not just a business function.
2. Differentiate the uniqueness and challenges of producing service as a product within the hospitality and tourism industry.

3. Select relevant trends in the macro-environments that are influencing the strategic directions of organizations within hospitality and tourism and present on how they are reacting to the trends.
4. Distinguish the major characteristics affecting consumer behavior, and the specific cultural, social, personal, and psychological factors that influence consumers in promotional initiatives.
5. Distinguish the major group markets that comprise the hospitality and tourism industry and assess the positive attributes of each market.
6. Differentiate the various strategies used to segment markets; select specific markets based on the appraisal of the appropriate targeting strategies; and apply the best positioning strategy that would provide a competitive advantage.
7. Separate the various product levels (core, facilitating, supporting, and augmented) that combine to deliver the holistic experience of the product to the guest.
8. Detect the key aspects and conditions that define successful hospitality and tourism brands.
9. Calculate the price elasticity of demand and assess the level of quality and brand strength associated with the various services and products in the hospitality and tourism industry.
10. Calculate pricing for services and products in hospitality and tourism based on generally accepted industry pricing approaches.
11. Illustrate examples of advertising and assess effectiveness.
12. Illustrate examples of public relations activities including sponsorships, special events, corporate communications, and lobbying, and assess effectiveness as it relates to brand identity.
13. Illustrate examples of e-marketing and assess effectiveness as it relates to brand identity.

HOST 261 Events Management (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HOST 101.
*Recommended Preparation: Qualification for ENG 100 **or** qualification for ESL 100.*
Comment: Effective Fall 2019 HOST 261 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 261 prepares students to plan and administer successful functions, special events, meetings and conventions. Students explore topics such as exhibitions, convention programming, festivals, venue selection, social events, catering needs, sustainability, technology, careers and staffing, event marketing, design and decor, and current trends.

Upon successful completion of HOST 261, the student should be able to:
1. Examine the various segments of the industry including meetings, conventions, incentives, exhibitions, festivals and events.
2. Evaluate sustainable practices in the events management industry.
3. Design a special events plan.
4. Assess various components needed to execute a successful event.

HOST 265 Tourism Development and Management (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HOST 101.
*Recommended Preparation: Qualification for ENG 100 **or** qualification for ESL 100. Comment: Effective Fall 2019 HOST 265 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.*

HOST 265 exposes students to planning, developing, implementing and managing tourism within a destination. This course presents tourism development as a process with its own organizational structures and its own responses to the economic cycle of supply and demand. Students study various destinations in order to analyze and identify the components of successful tourism programs.

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

1. Compare and contrast the costs and benefits of tourism, economically, environmentally, and socially/culturally in context of the various stakeholders (residents, visitors, owners/operators and government) of tourism.
2. Summarize the economic impact of tourism by considering the multiplier effect, regression analysis, forecasting and other economic indicators.
3. Distinguish the various factors that contribute to the motivation and propensity of individuals to travel.
4. Describe the various associations and organizations that comprise the development and management of tourism internationally, nationally, regionally, and locally and explain the mission, goals and activities of each.
5. Distinguish best practices for tourism destination policy-making, planning, development, and management.
6. Propose the principles, components and approaches that go into development of tourism destinations.
7. Distinguish the concepts and principles of sustainability (economic, environmental, and social/cultural) and appraise the best practices of destinations, resorts, and tourism operations.
8. Analyze the key concepts, issues, and impacts of tourism.
9. Assess the unique history and characteristics of Hawaii's tourism industry.

HOST 270 Tourism Security and Safety (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in HOST 101.
Comment: Effective Fall 2019 HOST 270 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 270 covers the security and safety concerns in society in general and the travel and hospitality industry in particular, with a special focus on strategies for effectively managing travel risks and safety. Students will learn about all aspects of security in preparation for dealing with these concerns in their daily lives and in their future careers in hospitality and tourism.

Upon successful completion of HOST 270, the student should be able to:
1. Explain the social and economic significance of tourism and the detrimental impact terrorism or a disaster can have on a destination.
2. Evaluate elements of a safety/security plan that synthesizes government (e.g. TSA, Police and Fire, Hawaiʻi Tourism Authority) and private organizations for the protection of both residents and guests.
3. Discuss the legal issues relevant to travel and tourism operations.
4. Evaluate procedures used by travel and tourism operations to manage risk crisis communications, property protection, and limit loss of revenue.
5. Explain current issues and trends related to cybercrimes and identify methods for the protection of data and guest information.

HOST 280 Hospitality Management (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in HOST 101 **or** a grade of "C" or higher in CULN 111.*
*Recommended Preparation: Qualification for ENG 100 **or** qualification for ESL 100.*
Comment: Effective Fall 2019 HOST 280 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 280 examines the key principles and processes of management in the hospitality industry that are essential for organizational effectiveness. Focuses on leadership skill building, decision-making processes, and human relations management.

Upon successful completion of HOST 280, the student should be able to:
1. Apply leadership skills that impact hospitality organizational effectiveness.
2. Demonstrate decision-making skills by applying key management concepts and principles.
3. Relate Hawaiian values to value-centered management.

HOST 293 Hospitality and Tourism Internship (3)
2 hours seminar
15 hours fieldwork per week (A total of 225 hours internship per semester)

*Prerequisite(s): A grade of "C" or higher in HOST 100 **or** a grade of "C" or higher in CULN 111**; and** acceptance into the Associate in Science degree in Hospitality and Tourism program **or** acceptance into the Associate in Science degree in Culinary Arts program**; and** consent of the Department.*
Comment: Effective Fall 2019 HOST 293 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 293 is a supervised field experience that is related to the student's major or career goals. The experience will enable the student to apply knowledge and skills learned in coursework to the work environment.

Upon successful completion of HOST 293, the student should be able to:
1. Apply job readiness skills to obtain and complete an internship in the hospitality industry.
2. Perform duties at the internship site applying industry standards and skills, and classroom knowledge.
3. Analyze and propose solutions for improvement of the technical and human skills, work habits, inter-relationships, operational measures of success, quality assurance methods and sustainability practices in the workplace.
4. Evaluate one's career goals, accomplishments, achievements, and activities during the academic journey.

HOST 320 Vacation and Condominium Hospitality Operations (3)
3 hours lecture per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Hospitality Operations Management program **or** satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Travel and Tourism Operations Management program **or** consent of instructor.*
Comment: Effective Fall 2019 HOST 330 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 320 is the study of vacation ownership in timeshare, condominium, fractional, private residence clubs, destination clubs and second homes. The course will explore the growth of vacation and condominium hospitality operations with an emphasis on the unique aspects of project financing, marketing, real estate contracts, exchange programs, and resort operations.

Upon successful completion of HOST 320, the student should be able to:
1. Describe the history and growth of the vacation ownership sector of the hospitality industry.
2. Identify the unique services, amenities, and operational requirements of vacation ownership.
3. Compare the return on investment structure of vacation ownership from the perspective of a developer in contrast to the development of a traditional hotel.
4. Compare the operational financial accounting of vacation ownership from the perspective of an operator in contrast to the operation of a traditional hotel.
5. Assess the advantages of vacation ownership from the perspective of the guest/owner.
6. Develop a complete marketing plan for a timeshare operation.
7. Explain the financing, contract and legal considerations of the real estate purchase involved in vacation ownership.
8. Summarize the procedures, policies and legal principles of working with owner associations and boards.
9. Identify the unique services, amenities and operational requirements of residential condominium operations.

HOST 330 Sustainable Hospitality Facility Design and Operations (3)
3 hours lecture per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Hospitality Operations Management program **or** satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Travel and Tourism Operations Management program **or** consent of instructor.*

Comment: Effective Fall 2019 HOST 330 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 330 is the study of the pillars of hospitality business management that incorporates planet, people, profit, and ethics. The course establishes a broad foundation in sustainability providing students with local, regional, and global perspectives on current and pressing issues and problems related to the hospitality industry.

Upon successful completion of HOST 330, the student should be able to:
1. Describe the evolution of sustainable development in the hotel industry and trends in sustainable regulations.
2. Explain the importance of the development of sustainable standards and certification (e.g. LEEDs Certification).
3. Identify trends in guest expectations of hospitality organizations to develop and practice sustainable design and operations.
4. Demonstrate how to implement Carbon Neutral Policies.
5. Construct a Cost/Benefit Analysis of sustainable hospitality development from a return on investment (ROI) perspective.
6. Conduct a sustainability/energy audit of a hospitality operation and apply the appropriate benchmarks for measuring sustainability.
7. Synthesize the various concepts of the Triple Bottom Line by holistically examining the best practices of hospitality operations.
8. Illustrate the required elements to plan and deliver sustainable meetings and events.

HOST 340 Lodging Industry Analytics and Revenue Management (3)
3 hours lecture per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Hospitality Operations Management program **or** satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Travel and Tourism Operations Management program **or** consent of instructor.*
Comment: Effective Fall 2019 HOST 340 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 340 will provide students with an appreciation of the current landscape of the global lodging industry with a focus of relevant current events and trends that are shaping the accommodations sector of the industry. Students will gain a thorough knowledge of the foundational metrics, concepts, and definitions that are used today to define the performance and success of the lodging industry. Students will gain the ability to analyze various types of industry data and make strategic inferences based on industry defined approaches to analysis. HOST 340 is also the study of the effective practices of revenue management with an emphasis on insightful forecasting to effectively manage rates and maximize profits in periods of both high and low demand.

Upon successful completion of HOST 340, the student should be able to:
1. Classify the key brands, corporations, affiliations, franchises, management companies, and owners of the lodging industry based on geographic and non- geographic categories.
2. Based on industry defined guidelines, create a competitive set.
3. Calculate relevant statistics and metrics used by the lodging industry.
4. Conduct property level benchmarking utilizing STAR reports.
5. Discover key lodging trends through the interpretation of essential performance reports.
6. Apply the correct methodology to determine key metrics contributing to lodging profitability.
7. Define what is a Destination Report, who uses them, how and when they are created, and how to determine comparable markets.
8. Describe and be able to indicate the appropriate utilization of various revenue management tactics, e.g. forecasting, rate management, duration control, capacity management, and displacement analysis.
9. Describe and be able to indicate the appropriate utilization of various revenue management strategies, e.g. demand generation, marketing strategies, strategic pricing, managing revenue streams, strategic packaging, and distribution channel management.

HOST 350 Strategic Hospitality Leadership (3)
3 hours lecture per week

*Prerequisite(s): Satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Hospitality Operations Management program **or** satisfactory completion of the Associate in Science degree in Hospitality and Tourism with a concentration in Travel and Tourism Operations Management program **or** consent of instructor.*
Comment: Effective Fall 2019 HOST 350 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

HOST 350 is a study of the rapidly changing and dynamic hospitality industry where leaders need to be informed and ready to react to macro trends such as labor availability, evolutionary technologies, economic volatilities, terrorism, political stability, and globalization. Major contemporary leadership approaches such as strategy selection, brand positioning, business development, values based leadership, and the strategic planning process will be examined with an emphasis on case examples of best practices of leading hospitality organizations.

Upon successful completion of HOST 350, the student should be able to:
1. Describe the evolution of the significant leadership theories and be able to select the appropriate approaches for the hospitality industry.
2. Identify the macro-environmental forces that have had, and will continue to have, an impact on the hospitality industry.
3. Evaluate the relationship of brand and positioning strategies to organizational success.
4. Distinguish best practices of hospitality organizations that have successfully sustained strategies of superior guest service.
5. Evaluate various strategic plans for their completeness in addressing the essential components of effective long-term planning.

HUMAN DEVELOPMENT & FAMILY STUDIES

HDFS 230 Human Development (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.
Comment: Human Development and Family Studies (HDFS) 230 was formerly known as Family Resources (FAMR) 230.

HDFS 230 examines the lifespan from conception to death emphasizing the interrelationships of biological, cognitive and psychosocial development in the context of a systems framework.

Upon successful completion of HDFS 230, the student should be able to:
1. Explain the interrelated aspects of biosocial, cognitive, and psychosocial development across the lifespan.
2. Apply human development theories, concepts, and research to personal, academic, occupational, and community experiences.
3. Compare and contrast fundamental theories of human development and behavior.
4. Synthesize and convey ideas, utilizing critical thought and reflection clearly in oral/sign and written communication.
5. Investigate the diversity of human development from local, regional, and global perspectives.

HUMANITIES

HUM 210 Managing Yourself and Leading Others: Leadership Development (3) KCC AA/DH and KCC AS/AH
3 hours seminar per week

*Prerequisite(s): ENG 100 with a grade of "C" or higher **or** ESL 100 with a grade of "C"*
or higher.
*Recommended Preparation: HIST 151 **and** HIST 152.*

HUM 210 introduces basic leadership theories, concepts, models, and issues. It explores leadership styles and philosophies, moral and ethical responsibilities, conflict resolution, team building, and empowerment. It provides an opportunity to develop essential leadership skills through analysis, observation and application.

Upon successful completion of HUM 210, the student should be able to:
1. Demonstrate a fundamental understanding of leadership, including theories, concepts, models, and issues.
2. Analyze the strengths, weaknesses, effectiveness, personality traits, and abilities of leaders both historical and contemporary.
3. Articulate personal values and formulate a personal leadership philosophy.

HUM 269 (Alpha) Study Abroad (Designated Region, Variable Credit) (1-6) KCC AA/DH and KCC AS/AH Summer
Variable numbers of hours lecture and lecture/lab per week

Prerequisite(s): Consent of instructor.
Recommended Preparation: One or more semester course(s) in the language, history or culture of the designated country or region.
Comment: HUM 269 is offered in the Summer semester only. Instructor approval is required.
HUM 269 (Alpha) is an on-site study of the designated society's language, values, arts, and culture.

Upon successful completion of HUM 269 (Alpha), the student should be able to:
1. Demonstrate increased sensitivity to the peoples and cultures of the country visited through reflective journal writing and capstone presentation.
2. Identify key concepts of internationalism and the interdependence of cultures.
3. Compare cultural values and methods coping with our changing world.
4. Discuss, orally and in writing, ways in which the humanities enrich daily life in the country visited, and in the student's own society.

HUM 269ES Study Abroad (Spain) (3) KCC AA/DH and KCC AS/AH Summer
Variable numbers of hours of lecture and lecture/lab per week

Prerequisite(s): Consent of instructor.
Corequisite(s): Enrollment in the Study Abroad Program via the institute, ACADEMIA MESTER.
Recommended Preparation: One or more semester course(s) in the language, history or culture of Spain.
Comment: Instructor approval is required for registration in HUM 269ES.

HUM 269ES is an on-site study of Spanish society's language, values, arts, and culture.

Upon successful completion of HUM 269ES, the student should be able to:
1. Demonstrate sensitivity to the peoples and cultures of Spain.
2. Demonstrate awareness of internationalism and an interdependence of cultures.
3. Compare cultural values and methods coping with our changing world.
4. Discuss, orally and in writing, ways in which the humanities enrich daily life in Spain, and in his or her own society

HUM 269FC Study Abroad (China) (1-12)
Variable numbers of hours of lecture and lecture/lab per week

Prerequisite(s): Consent of instructor.
Comment: Instructor approval is required. Please contact the Paul S. Honda International Center at hic@hawaii.edu for more information about this course.

HUM 269FC offers an on-site study of China's language, values, arts, and culture.

Upon successful completion of HUM 269FC, the student should be able to:
1. Demonstrate increased sensitivity to the peoples and cultures of China through reflective journal writing and capstone presentation.
2. Identify key concepts of internationalism and the interdependence of cultures.
3. Compare cultural values and methods coping with our changing world.
4. Discuss, orally and in writing, ways in which the humanities enrich daily life in China, and in the student's own society.

HUM 269J Study Abroad - Japan (1-12)
Variable numbers of hours lecture and lecture/lab per week

Prerequisite(s): Consent of instructor.
Comment: Instructor approval is required. Please contact the Paul S. Honda International Center at hic@hawaii.edu for more information about this course.

HUM 269J offers an on-site study of the designated society's language, values, arts, and culture.

Upon successful completion of HUM 269J, the student should be able to:
1. Demonstrate increased sensitivity to the peoples and cultures of the country visited through reflective journal writing and capstone presentation.
2. Identify key concepts of internationalism and the interdependence of cultures.
3. Compare cultural values and methods coping with our changing world.
4. Discuss, orally and in writing, ways in which the humanities enrich daily life in the country visited, and in the student's own society.

HUM 295 (Alpha) Humanities Research Experience (1-3) KCC AA/DH and KCC AS/AH
3 hours cooperative education/work experience per week per credit

Prerequisite(s): Consent of instructor.
Comment: Letter grade only. HUM 295 (alpha) may not be audited. HUM 295 (alpha) may not be taken credit/no credit.

HUM 295 (Alpha) is to provide students with methodological skills necessary to carry out independent, student designed scholarly research and inquiry, under the direction of and in collaboration with faculty, peer mentors, and community partnerships that promote students' own path of research in order to engage with and service their community.

Upon successful completion of HUM 295 (Alpha), the student should be able to:
1. Define a focus or theme and conduct literature research on theoretical frameworks on topics that demonstrate a familiarity with resources on Humanities knowledge including oral traditions, cultural practitioners, primary and secondary literature as well as visual and tactile expressions.
2. Solicit ideas and select a plausible framework to support theme.
3. Design a theoretical framework (proposal perspective).
4. Synthesize researched information.
5. Test theoretical framework.
6. Document and formally present the results of thesis testing to an audience.

HUM 295HS Humanities Research in Hawaiian Studies (1-3) KCC AA/DH and KCC AS/AH
3 hours cooperative education/work experience per week per credit

Prerequisite(s): Consent of instructor.
Comment: Letter grade only. HUM 295HS may not be audited. HUM 295HS may not be taken credit/no credit. HUM 295HS may be repeated for a maximum of 6 credits.

HUM 295HS offers a research experience in Humanities, emphasizing methodological skills necessary to carry out independent, student designed scholarly research and inquiry in Hawaiian Studies.

Upon successful completion of HUM 295HS, the student should be able to:
1. Define a focus or theme and conduct literature research on theoretical frameworks on topics that demonstrate a familiarity with resources on Native Hawaiian knowledge including oral traditions, cultural practitioners, primary and secondary literature as well as visual and tactile expressions of Hawaiian culture.
2. Solicit ideas and select a plausible framework to support theme.
3. Design a theoretical framework (proposal perspective).
4. Synthesize researched information.
5. Test theoretical framework.
6. Document and formally present the results of thesis testing to an audience.

HUM 295SI Humanities Research in Sustainability Issues (1-3)
3 hours cooperative education/work experience per week per credit
Comment: Letter grade only. HUM 295SI may not be audited. HUM 295SI may not be taken credit/no credit. HUM 295SI may be repeated for a maximum of 6 credits.

HUM 295SI offers a research experience in Sustainability Issues, emphasizing methodological skills necessary to carry out independent, student designed scholarly research and inquiry in Sustainability.

Upon successful completion of HUM 295SI, the student should be able to:
1. Define a focus or theme and conduct literature research on theoretical frameworks on topics that demonstrate a familiarity with resources on Sustainability Issues including oral traditions, cultural practitioners, primary and secondary literature as well as visual and tactile expressions.
2. Solicit ideas and select a plausible framework to support theme.
3. Synthesize researched information.
4. Design a theoretical framework (proposal perspective).
5. Test theoretical framework.
6. Document and formally present the results of thesis testing to an audience.

INFORMATION and COMPUTER SCIENCES

ICS 100 Computing Literacy and Applications (3) KCC AS/NS
3 hours lecture per week

*Recommended Preparation: Qualification for ENG 100/ENG 100 **or** qualification for ESOL 94**; and** qualification for MATH 82 **or** qualification for a higher-level mathematics course.*

ICS 100 is an introductory survey of computers and their role in the information world emphasizing computing terminology, hardware, and software. Opportunities for "hands on" experience using applications software may include spreadsheets, word processing, presentations, and communications.

Upon successful completion of ICS 100, the student should be able to:
1. Utilize the basic features of computing applications to communicate effectively (major content area).

2. Utilize operating system interfaces to manage computing resources effectively and securely.
3. Utilize online resources for research and communication.
4. Define, explain, and demonstrate proper computing terminology usage in areas such as hardware, software, and communications.
5. Describe ethical and security issues involved in the use of computing technology.

ICS 101 Digital Tools for the Information World (3)
3 hours lecture per week

Recommended Preparation: Keyboarding experience; and credit in or qualification for ENG 100 or credit in or qualification for ESL 100; and credit in or qualification for MATH 103 or credit in or qualification for a higher-level mathematics course.
Comment: ICS 101 meets requirements for Shidler College of Business at the University of Hawai`i at Mânoa (UHM) and the College of Business at the University of Hawai`i at Hilo (UHH).

ICS 101 provides fundamental information technology concepts and computing terminology, productivity software for problem solving, computer technology trends and impact on individuals and society. Emphasizes the utilization of operating systems and the production of professional documents, spreadsheets, presentations, databases, and web pages.

Upon successful completion of ICS 101, the student should be able to:
1. Utilize the appropriate computing applications to produce professional documents, spreadsheets, presentations, databases, and web pages for effective communication (major content area).
2. Utilize operating system interfaces to manage computing resources effectively and securely.
3. Extract and synthesize information from available Internet resources using intelligent search and discrimination.
4. Define, explain, and demonstrate proper computing terminology usage in areas such as hardware, software, and communications to effectively interact with other computer users and to prepare for higher-level computer courses.
5. Describe ethical and security issues involved in the use of computing technology.

ICS 102 Introduction to Data Science (3)
3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESOL 100 or qualification for a higher-level English course; and qualification for MATH 103 or MATH 115 or qualification for a higher-level mathematics course.
Comment: ICS 102 has been approved for use as an elective for the Associate in Arts degree in Liberal Arts and the various AA Liberal Arts concentrations, as well as the Associate in Arts degree in Hawaiian Studies.

ICS 102 introduces students to the emerging field of Data Analytics, a field that combines knowledge of statistics, computing, and domain expertise. This course provides fundamental discussion of data, data principles and tools used in Data Analytics. Emphasis will be on utilization of Data Analytics tools to analyze and visualize data in a report presentation.

Upon successful completion of ICS 102, the student should be able to:
1. Describe ethical, legal, security, social issues and the need to engage in continuing professional development in Data Analytics.
2. Demonstrate knowledge of descriptive and inferential methods used in the analysis of data.
3. Demonstrate knowledge of data types, data structures, file formats and data acquisition, transformation and loading methods.
4. Demonstrate knowledge of common data analysis tools used in Data Analytics.
5. Demonstrate knowledge of translating business requirements to form a report or presentation using data analytic techniques.

ICS 110 Introduction to Object Oriented Visual Programming (3)
3 hours lecture per week

*Recommended Preparation: Keyboarding experience**; and** MATH 82 **or** a higher-level mathematics course**; and** ENG 22 **and** ICS 101.*

ICS 110 is an introduction to programming with user-friendly software (e.g., Android Application Inventor). Students use storyboarding design strategies to create mobile device animations and/or simple games with objects using block coding methods. These projects promote an understanding of basic object oriented programming constructs through the use of a drag and drop interface that manipulates device resources and readily available APIs (Application Programming Interfaces). Introductory projects based on contemporary and personal interests for students with or without programming experience will be emphasized.

Upon successful completion of ICS 110, the student should be able to:
1. Add components to a project.
2. Master fundamentals of programming terminology.
3. Use "looping."
4. Gather form data.
5. Use variables.
6. Access phone sensors.
7. Use event handlers.
8. Move sprites on phone using drag and drop.
9. Connect to a database.
10. Use phone camera resource.
11. Use phone bluetooth resource.

ICS 111 Introduction to Computer Science I (3)
3 hours lecture per week

*Prerequisite(s): Qualification for MATH 103 **or** qualification for a higher-level mathematics course **or** consent of instructor.*
Recommended Preparation: Computer experience

ICS 111 offers an overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.

Upon successful completion of ICS 111, the student should be able to:
1. Use an appropriate programming environment to design, code, compile, run and debug computer programs.
2. Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computing language.
3. Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language and basic security practices.
4. Demonstrate working with primitive data types, strings and arrays.

ICS 129 Introduction to Databases (3)
3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESOL 100; and qualification for MATH 103 or MATH 115 or qualification for a higher-level mathematics course.
Recommended Preparation: Credit in ICS 101 or ICS 102; and computer experience. Comment: ICS 129 is cross-listed as ITS 129 . Information Technology majors must take this course for a letter grade only.

ICS 129 introduces students to practical and theoretical database concepts. In addition, students learn to model databases using the entity relationship diagram method. The database language concepts, while general in nature, are demonstrated using an SQL platform. Overall database design and implementation issues will also be presented.

Upon successful completion of ICS 129, the student should be able to:
1. Define common database terminology.
2. Design and create a relational database using normalization rules.
3. Define a database management system (DBMS) and demonstrate its functions.
4. Use Structured Query Language for relational database management and data manipulation.
5. Follow best practices in secure database design.

ICS 141 Discrete Mathematics for Computer Science I (3) KCC AA/FQ
3 hours lecture per week

*Prerequisite(s): Qualification for MATH 135 **or** qualification for a higher-level mathematics course **or** consent of instructor.*
Recommended Preparation: ICS 111
Comment: ICS 141 provides the general mathematical foundation for the understanding of computer science concepts. It is intended for Computer Science majors and others interested in learning about the mathematics for Computer Science.

ICS 141 includes logic, sets, functions, matrices, algorithmic concepts, mathematical reasoning, recursion, counting techniques, and probability theory.

Upon successful completion of ICS 141, the student should be able to:
1. Analyze issues and apply mathematical problem solving skills to plan courses of action in decision-making situations.
2. Solve problems by using basic mathematical formal logic, proofs, recursion, analysis of algorithms, sets, combinatorics, relations, functions, matrices, and probability.

ICS 184 Introduction to Networking (3)
3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100 or qualification for a higher-level English course; and qualification for MATH 115 or qualification for a higher-level mathematics course.
Recommended Preparation: Credit in or qualification for ICS 101; and computer experience.
Comment: ICS 184 is cross-listed with ITS 124. Information Technology majors must take ICS 184 for a letter grade only.

ICS 184 provides students with an overview of essential networking concepts, terminology and skills. The course gives students a fundamental understanding of the technological, business and legal issues related to a networked organization. The course also introduces the student to security concepts such as cryptography, digital signatures, key management and authentication. Some students may opt to take the CompTIA Network+ exam upon the completion of ICS 184 because much of the CompTIA Network+ exam material is covered in class.

Upon successful completion of ICS 184, the student should be able to:
1. Manage networking projects as part of a team.
2. Discuss information security technologies such as cryptography, digital signatures, key management, and authentication as they relate to computer networks.
3. Describe the fundamental concepts, technologies, components, terminology, protocols, standards organizations, and business, legal, ethical, and security issues related to communications and data networks.
4. Describe a basic secure network architecture in accordance with current best practices given a specific need and set of hosts/clients.
5. Use current network tools to monitor, map and troubleshoot a network and to track and identify packets.

ICS 211 Introduction to Computer Science II (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ICS 111 **or** consent of instructor.*

ICS 211 reinforces and strengthens problem-solving skills using abstract data types and introduces software development practices. ICS 211 emphasizes the use of searching and sorting algorithms and their complexity, recursion, object-oriented programming, and data structures.

Upon successful completion of ICS 211, the student should be able to:
1. Use and implement abstract data types such as lists, stacks, queues, and trees.
2. Select the appropriate searching or sorting algorithm based on the algorithm's behavior.
3. Develop recursive algorithms and programs.
4. Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).
5. Produce robust and secure programs using exception handling and extensive program testing.

ICS 212 Program Structure (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ICS 211 **or** consent of instructor.*

ICS 212 includes program organization paradigms, programming environments, implementation of a module from specifications, the C and C++ programming languages.

Upon successful completion of ICS 212, the student should be able to:
1. Develop properly structured multi-file programs with automatic compilation.
2. Implement recursion, arrays, pointers, character variables, bitwise operators, structures, and linked data structures in C.
3. Use classes (constructors, destructor, and overloading assignment), operator overloading, inheritance, polymorphism, and linked data structures in C++.
4. Use standard C++ strings and C++ STL library data structures, such as STL lists.

ICS 241 Discrete Mathematics for Computer Science II (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ICS 141 **or** consent of instructor.*

ICS 241 includes program correctness, recurrence relations and their solutions, divide and conquer relations, graph theory, trees and their applications, Boolean algebra, introduction to formal languages and automata theory.

Upon successful completion of ICS 241, the student should be able to:
1. Analyze issues and apply complex mathematical problem solving skills to plan courses of actions in high-level decision-making situations.
2. Utilize such tools as graphs, trees, Boolean algebra, and recurrence relations.
3. Explain discrete math concepts such as formal languages, finite-state machines, and program correctness.

INTERDISCIPLINARY STUDIES

IS 54 Introduction to College for ESOL Students (1)
1.6 hours lecture/lab per week

*Prerequisite(s): A Test of English as a Foreign Language Internet-based Test (TOEFL iBT) score 32-60 **or** equivalent level.*
*Corequisite(s): ESOL 50 **and** ESOL 52.*
Comment: Comment: IS 54 is part of a three-course, one semester, intensive English program (IEP) designed for international students holding the F1 visa, who are: 1) non- native speakers of English with an English proficiency test score of TOEFL iBT 32-60 or equivalent level; and 2) interested in pursuing a degree program. Students in the IEP are provisionally admitted to the College and must enroll in ESOL 50, ESOL 52, and IS 54 concurrently. IS 54 is a 1-credit course. IEP tuition is managed by the Honda International Center.

IS 54 serves as an introduction to the college experience for first year International students (typically F-1 visa holders) concurrently enrolled in ESOL 50 and ESOL 52. Students learn about the U.S. college and university system, with particular emphasis on community colleges, Kapiʻolani Community College, and the University of Hawaiʻi.
Students explore and write about college majors and programs relevant to their short and long-range academic goals, while further developing communication skills in English.

Upon successful completion of IS 54, the student should be able to:
1. Use accurate and coherent English, orally or in writing, to articulate a personal academic plan.

IS 103 Introduction to College (3)
3 hours lecture per week

*Recommended Preparation: Consent of instructor **or** qualification for or concurrent enrollment in ENG 22 **or** qualification for or concurrent enrollment in ESOL 94.*

IS 103 serves as an introduction to the college experience for first year and returning college students. Students identify their short and long-range personal, college and career goals, while writing and revising an educational plan. Students document their daily activities as they develop self-management, critical thinking and learning skills.

Upon successful completion of IS 103, the student should be able to:
1. Identify short and long-range personal and college goals, and prepare an educational plan to meet those goals.
2. Re-evaluate and revise short and long-range personal and college goals and their educational plan to meet those goals.
3. List college facilities, policies, programs and services that can assist in achieving educational goals.
4. Use College level note-taking, critical reading, test taking, memory and concentration techniques.
5. Use time management, personal organization, stress management and study skills.
6. Identify and use academic support areas of the college.
7. Become actively involved in campus and/or community activities.
8. Use appropriate technology for conducting research and conveying ideas.
9. Communicate effectively in writing and speaking.
10. Find information from library, Internet, and other sources.
11. Research occupations and use decision-making processes in selecting a career.
12. Use strategies to complete out-of-class work efficiently and effectively.

IS 104 Career Exploration (1)
3 hours lecture per week

Recommended Preparation: Qualification for ESOL 94F or ESOL 94S or ENG 100S.
Comment: IS 104 may only be taken credit/no credit. IS 104 is repeatable for a maximum of two credits.

IS 104 provides opportunities and resources for students to seek career information related to academic and occupational interest patterns, which form the foundation for sound career decision-making. Students are guided through individual and group exercises that assist in identifying needs, values, wants, interests, and abilities. The purpose of the course is to help students develop a strong foundation for major and career decision planning through career inventories, research on careers, and personal reflection.

Upon successful completion of IS 104, the student should be able to:
1. Identify their career interest.
2. Identify a major associated with their career interest.
3. Express, through a final presentation, individual values and beliefs to support their purpose and motivation for their identified career pathway.

IS 108 Foundation for College Success (3)
3 hours lecture per week

Comment: Course materials and field trips will cost approximately $45.

IS 108 celebrates students' transition to college and creates learning experiences that foster success in college and in life. This course encourages self-reflection and growth, awareness of multiple perspectives, collaborative interactions, and an exploration of self and community in the context of place. Through this course, students will identify working and learning styles and strengths, discover their authentic voice, learn how to work more effectively in teams, and build a learning community through sharing of life stories and experiences that enrich and strengthen that community. Students will also develop a connection to and a responsibility for Kapiʻolani Community College and its surroundings, as well as an understanding of the legacy left by Queen Kapiʻolani, our namesake.

Upon successful completion of IS 108, the student should be able to:
1. Increase awareness of and reflect on new perspectives about self, others, and community.
2. Appraise self-growth in the context of personal strengths and gifts.
3. Acknowledge strengths and gifts in others in order to create effective working groups.
4. Communicate and interact effectively.
5. Articulate the significance of Queen Kapiʻolani and her legacy to the College and community.
6. Connect to the ʻāina where Kapiʻolani Community College resides and discover the historical significance of Lēʻahi (Laeʻahi) and its surrounding areas.
7. Determine oneʻs own personal responsibility and contribution to Hawaiʻi, its land, and its people.

IS 108L Foundation for College Success Laboratory (1)
3 hours lab per week

Prerequisite(s): Credit in IS 108.

IS 108L is a laboratory to follow IS 108 Foundation for College Success. The course includes hands-on activities, individual and group presentations, community work days and research projects to practice and enhance college success skills learned in IS 108. Emphasis is placed on continued appraisal of self-growth through the context of personal strengths and gifts, working styles, communication tools, and personal and team accountability in the context of place and lineage. Students will continue to build community and enhance learning through the acknowledgement of different perspectives and personal stories.

Upon successful completion of IS 108L, the student should be able to:
1. Apply increased awareness of multiple perspectives about self, others, and community in the context of the college experience.
2. Use research skills to identify moʻokūʻahuhau (lineage), one hānau (place of origin) and to hoʻolauna (introduction of self).
3. Use research skills to identify the legacy of a Hawaiian monarch in order to further appraise and develop personal strengths and gifts in relation to future educational and personal goals.
4. Practice effective communication and listening skills.
5. Use the working styles to identify areas of improvement in learning to enhance classroom performance and the college experience.
6. Apply personal and team responsibility and accountability.
7. Apply mindfulness techniques.

IS 109 Finding Purpose: Culture, Self, and Community (3) KCC AA/DH and KCC AS/AH
3 hours lecture per week

*Prerequisite(s): Qualification for ENG 22 **or** qualification for ESOL 94 **or** consent of instructor.*

IS 109 celebrates the student's transition to college and focuses on learning experiences that encourage the exploration of purpose by examining the student's personal identity, culture, and community through place-based cultural values. While honoring the integrity of individual cultural knowledge, it provides readings and activities which develop the student's connections with self, with others, with places, and with their community.
Based on their insights and discoveries, the student will develop a personal learning plan that will help to support and direct their educational and career goals. The student will also identify and start to build the support networks to achieve the goals they have identified.

Upon successful completion of IS 109, the intended student learning outcomes are:
1. Determine the skills and attitudes necessary for success as 21st century members of various communities.
2. Use critical reading, thinking, and communication skills to engage course content.
3. Articulate an awareness of self by identifying personal strengths, values, interests, and cultural influences.
4. Discuss the connection between individual responsibility and community with regard to major issues in both a local and global context.
5. Create tentative short and long range personal and career goals.

IS 111 Financial Literacy (1)
1 hour lecture per week

IS 111 is designed to enhance students' knowledge and skills regarding personal finance to increase financial literacy. Students will learn the financial planning process and evaluate their money management attitudes and behaviors. In this course, students will determine the cost to fund their intended college degree and the possible financial resources available to attain that goal.

Upon successful completion of IS 111, the student should be able to:
1. Use the financial planning process to budget and manage personal expenses.
2. Identify the financial resources available to fund a college education.
3. Identify types of student loans and repayment options, compare expected income with estimated monthly student loan payments, and understand the responsibilities of being a student loan borrower.
4. Calculate the total cost of a 2-year and/or 4-year degree.
5. Obtain a credit report, understand how it is used and what factors influence it, how to review for and report errors, and how credit scores can impact future financial decisions.
6. Identify the basic terminology of credit cards and bad credit habits.
7. Create a personal statement for scholarship applications.

IS 120 Exploration in Health Careers (1)
1 hour lecture per week

IS 120 provides opportunities and resources for students to explore academic programs and occupations in healthcare. IS 120 delivers an authentic look into healthcare occupations as students hear from professionals in multiple healthcare fields about their academic and professional journeys in healthcare. Students are then guided through individual and group exercises that assist in identifying their own needs, values, wants interests, and abilities. Through guest speakers, health career research, and personal reflection, students develop a strong foundation for better understanding the challenges and benefits of working at various levels of healthcare.

Upon successful completion of IS 120, the student should be able to:
1. Identify their career interest in a health field.
2. Identify a major associated with their career interest.
3. Express individual values and beliefs to support their purpose and motivation for their interest in a healthcare field.
4.

IS 161 Introduction to Creative Thinking (3) KCC AA/DA and KCC AS/AH
3 hours lecture per week

IS 161 introduces students to the skills and strategies of creative thinking. Designed for students in all majors, the course will examine creativity as a fundamental component for innovation and success in any field, from art to science, technology to business. We will explore the creative process from various theoretical perspectives as well as the influences of education, culture and the environment on creative thinking. Creativity will be seen as a natural process that not only allows for greater adaptability, idea generation and problem solving, but which also adds an increased dimension of richness and meaning to our lives. Students will have the opportunity to develop and apply these skills in real world contexts, and to experience the value of creativity in developing a well rounded, flexible and adaptive approach to an increasingly complex world.

Upon successful completion of IS 161 the student should be able to:
1. Develop original solutions to problems by employing the basic strategies of creative thinking: synthesizing ideas, making connections across different domains, perceiving alternative perspectives, as well as applying divergent, inverse, metaphorical and analogical thinking.
2. Describe and analyze the interdisciplinary nature of creative thinking.
3. Describe and evaluate one's own creative thinking process.
4. Apply concepts of sustainability to local, regional and/or global challenges.

INFORMATION TECHNOLOGY

ITS 122 Cyber Security Fundamentals (3)
3 hours lecture per week

*Prerequisite(s): Qualification for ENG 100 **or** qualification for ESL 100 **or** qualification for a higher-level English course; **and** qualification for MATH 103 **or** qualification for MATH 115 or qualification for a higher-level mathematics course.*
Recommended Preparation: ITS 124.
Comment: Information Technology majors must take ITS 122 for a letter grade only. Students may be required to spend up to $120 for equipment and/or software for use in the class.

ITS 122 introduces fundamental cyber security concepts. This course covers the fundamentals of risk management, cryptography, incident response and recovery, access control, authentication, types of attackers and attacks, and countermeasures. Students sometimes choose to take the CompTIA Security+ certification test following completion of this class because of the large overlap between this course and the Security+ exam objectives.

Upon successful completion of ITS 122, the student should be able to:
1. List the first principles of security and describe why each principle is important to security and its relationship to the development of security mechanisms and security policies.

2. Describe why good human machine interfaces are important to system use, the interaction between security and system usability and the importance for minimizing the effects of security mechanisms.
3. Analyze common security failures and identify specific design principles that have been violated, and the needed design principle, when given a specific scenario.
4. List the fundamental concepts of the Information Assurance/Cyber Defense discipline and describe how they can be used to provide system security.
5. Identify the elements of a cryptographic system and describe the differences between symmetric and asymmetric algorithms, which cryptographic protocols, tools and techniques are appropriate for a given situation, and implementation issues.

ITS 124 Introduction to Networking (3)
3 hours lecture per week

*Prerequisite(s): Qualification for ENG 100 **or** qualification for ESL 100 **or** qualification for a higher-level English course**; and** qualification for MATH 115 **or** qualification for a higher-level mathematics course.*
*Recommended Preparation: Credit in or qualification for ICS 101; **and** computer experience..*
Comment: ITS 124 is cross-listed with ICS 184. Information Technology majors must take ITS 124 for a letter grade only.

ITS 124 provides students with an overview of essential networking concepts, terminology and skills. The course gives students a fundamental understanding of the technological, business and legal issues related to a networked organization. The course also introduces the student to security concepts such as cryptography, digital signatures, key management and authentication. Some students may opt to take the CompTIA Network+ exam upon the completion of ITS 124 because much of the CompTIA Network+ exam material is covered in class.

Upon successful completion of ITS 124, the student should be able to:
1. Manage networking projects as part of a team.
2. Discuss information security technologies such as cryptography, digital signatures, key management, and authentication as they relate to computer networks.
3. Describe the fundamental concepts, technologies, components, terminology, protocols, standards organizations, and business, legal, ethical, and security issues related to communications and data networks.
4. Describe a basic secure network architecture in accordance with current best practices given a specific need and set of hosts/clients.
5. Use current network tools to monitor, map and troubleshoot a network and to track and identify packets.

ITS 128 Problem Solving and the Programing Process (3)
3 hours lecture per week

*Prerequisite(s): Qualification for MATH 82 **or** higher-level mathematics course or permission of instructor, Information Technology Program Director, or Business, Legal & Technology Department Chairperson.*
Recommended Preparation: Credit or concurrent enrollment in ICS 101.
Comment: Information Technology majors must take ITS 128 for a letter grade only.

ITS 128 offers an overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language deemed most appropriate for today's business environment. Emphases are placed on valid solution designs and correct language syntax usage. Basic programming structures and concepts, common to all programming languages, are major components of this course.

Upon successful completion of ITS 128, the student should be able to:
1. Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computing language.
2. Demonstrate working with primitive data types, strings and arrays.
3. Use an appropriate programming environment to design, code, compile, run and debug computer programs.
4. Illustrate basic programming concepts such as program flow and syntax of a high- level general purpose language and basic security practices.

ITS 129 Introduction to Databases (3)
3 hours lecture per week

Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100; and qualification for MATH 103 or qualification MATH 115 or qualification for a higher- level mathematics course.
Recommended Preparation: Credit in ICS 101 or ICS 102 and computer experience.
Comment: ITS 129 is cross-listed as ICS 129. Information Technology majors must take ITS 129 for a letter grade only.

ITS 129 introduces the student to databases. The course covers the tools needed to query and modify database objects and introduces the student to database design concepts. A substantial part of the course involves the understanding of the relationship between databases, tables, records and fields. The course includes hands-on activities in a computer environment that provides the student with experience designing, creating, and manipulating a database using the appropriate information technology tools.

Upon successful completion of ITS 129, the student should be able to:
1. Define common database terminology.
2. Design and create a relational database using normalization rules.

3. Define a database management system (DBMS) and demonstrate its functions.
4. Use Structured Query Language for relational database management and data manipulation.
5. Follow best practices in secure database design.

ITS 142 Network Security (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ITS 122 and a grade of "C" or higher in ITS 124.
Comment: Information Technology majors must take ITS 142 for a letter grade only. Students may be required to spend up to $120 for equipment and/or software for use in the class.

ITS 142 provides an overview of network security principles and tools. This course emphasizes the practical application of skills needed to design, implement, and support network security. This course supports the development of critical thinking and complex problem-solving skills through hands-on labs and allows students to experiment with network behavior.

Upon successful completion of ITS 142, the student should be able to:
1. Describe the security threats facing modern network infrastructures.
2. Secure network devices.
3. Secure the Local Area Network to mitigate common Layer 2 attacks.
4. Implement secure network design, management and reporting.

ITS 144 Computer Architecture Concepts and Support (3)
6 hours lecture per week for 8 weeks or 3 hours lecture per week for 16 weeks

Prerequisite(s): Qualification for ENG 100 or ESL 100 or higher-level English course; and qualification for MATH 82 or higher-level mathematics course.
Recommended Preparation: Qualification for or completion of ICS 101.
Comment: ITS 144 may require hardware/software supplies or other resources up to $100.00 for hands-on activities.

ITS 144 provides computer architecture and support concepts and hands-on activities relating to the following topics: Computer operating system concepts, computer hardware concepts, computer security, Windows Operating Systems, Linux Operating Systems, Virtualization, Troubleshooting, Computer Maintenance, Operational Policies and Procedures. While the focus of the course is not certification exam preparation, ITS 144 is aligned with the CompTIA A+ certification test objectives.

Upon successful completion of ITS 144, the student should be able to:
1. Describe and utilize the major PC, laptop, tablet, and mobile device operating systems, their functions, and terminology.
2. Describe, install, maintain, and troubleshoot PC, laptop, and mobile device components.
3. Describe and utilize Cloud Computing services.
4. Explain and implement best practices in change management, documentation, and System Support Information Management.
5. Describe common TCP/IP and wireless networking protocols and devices and securely configure a computer system on a network.
6. Describe virtualization and install and utilize virtual machines.

ITS 148 Problem Solving and the Programming Process II (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C"or higher in ITS 128 **or** a grade of "C"or higher in ITS 111 **or** consent of Business, Legal, and Technology Department Chairperson, Information Technology Program Coordinator, or instructor.*
Recommended Preparation: Credit in or qualification for ICS 101 or higher level courses in the same area/field (or areas/fields) of study.
Comment: Information Technology majors must take ITS 148 for a letter grade only.

ITS 148 is an intermediate level programming course in using modern programming tools to provide viable computing solutions in a business environment. It is assumed that the student is familiar with computer programming. Applications with forms, classes, and code are developed in a programming language deemed most appropriate for the course. Computer applications are executed, debugged and undergo tests of their validity. Object oriented programming concepts are emphasized and realized through the creation of user defined classes and their properties and methods. Data validation and general procedure development are also components of this course.

Upon successful completion of ITS 148, the student should be able to:
1. Use and implement abstract data types such as lists, stacks, queues, and trees.
2. Select the appropriate searching or sorting algorithm based on the algorithm's behavior.
3. Develop recursive algorithms and programs.
4. Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).
5. Produce robust and secure programs using exception handling and extensive program testing.

ITS 149 (Alpha) Topics in Database Administration (3)
3 hours lecture per week

*Prerequisite(s): Credit in ICS 129 or ITS 129; **or** credit in ICS 111 or ITS 128; or consent of the instructor or the Business, Legal, & Technology Department Chairperson.*
Recommended Preparation: Credit in or qualification for ICS 101 or ICS 102 or higher level courses in the same area/field (or areas/fields) of study.
Comment: ITS 149 may require additional hardware/software supplies as well as a minimum 16GB external disk drive. Information Technology majors must take ITS 149 for a letter grade only.

ITS 149 (Alpha) presents contemporary database topics in Information Technology. The purpose of ITS 149 is to maintain currency with rapidly changing technologies throughout the world, with an emphasis in Hawai`i's business industry. Topics may include database administration (database design, advanced SQL statements, Extract Transform, and Load (ETL), data warehousing, etc.); database statistical analysis (modern tools for statistical analysis, data visualization, etc.); and others as they emerge.

Upon successful completion of ITS 149, the student should be able to:
1. Understand data and its analysis using statistical principles, computing methods, and coding throughout the data lifecycle.

2. Understand the context of the data, domain it comes from, data types, questions of interest and methods to solve them.
3. Recognize professional responsibilities as a data analysts: understand ethical responsibilities, understand the concepts of security and privacy of data, be able to articulate misuse and abuse of data.
4. Effectively communicate (verbal, written and visual) in a variety of professional contexts.
5. Function effectively as a member or leader of a team engaged in data management and analysis activities.

ITS 149AD Topics in Data Administration: Database Administration (3)
3 hours lecture per week
*Prerequisite(s): Credit in ICS 129 or ITS 129; **or** credit in ICS 111 or ITS 128; **or** consent of the instructor or the Business, Legal, & Technology Department Chairperson.*
*Recommended Preparation: Credit in or qualification for ICS 101 **or** ICS 102.*
Comment: ITS 149AD may require additional hardware/software supplies as well as a minimum 16GB external disk drive. Information Technology majors must take ITS 149AD for a letter grade only.

ITS 149AD presents the contemporary database topic of basic database administration. In ITS 149AD students learn how to install and maintain a database server. They will gain a conceptual understanding of database server architecture and how its components work and interact with one another. They will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques.

Upon successful completion of ITS 149AD, the student should be able to:
1. Understand data and its analysis using statistical principles, computing methods, and coding throughout the data lifecycle.
2. Understand the context of the data, domain it comes from, data types, questions of interest and methods to solve them.
3. Recognize professional responsibilities as a data analysts: understand ethical responsibilities, understand the concepts of security and privacy of data, be able to articulate misuse and abuse of data.
4. Recognize professional responsibilities as a data analysts: understand ethical responsibilities, understand the concepts of security and privacy of data, be able to articulate misuse and abuse of data.
5. Effectively communicate (verbal, written and visual) in a variety of professional contexts.
6. Function effectively as a member or leader of a team engaged in data management and analysis activities.
7. Describe database administration concepts and processes used in DBMS administration.
8. Apply and evaluate database administrative tools and functions used in DBMS administration.

ITS 149R Database Administration: Introduction to Data Analytics with R (3)
3 hours lecture per week

*Prerequisites: Credit in ICS 129 or ITS 129; or credit in ICS 111 or ITS 128; **or** consent of instructor or Business, Legal, & Technology Department Chairperson.*
Recommended Preparation: Credit in or qualification for ICS 101 or ICS 102 or higher level courses in the same area/field (or areas/fields) of study.
Comment: ITS 149R may require additional hardware/software supplies as well as a minimum 16GB external disk drive. Information Technology majors must take ITS 149R for a letter grade only.

ITS 149R presents the contemporary database topic of Data Analytics, a field at the nexus of statistics, computing, and domain expertise. Students will gain an overview of the field, and learn some of the basic concepts, principles and tools used in Data Analytics. The course will briefly touch upon most of the core subjects that will be studied more in-depth in courses that the students may take later in Database Analytics courses or programs. The course will also provide students with a hands-on introduction to R, with opportunities to analyze real data through a sequence of guided exercises and a final project report.

Upon successful completion of ITS 149R, the student should be able to:

1. Understand data and its analysis using statistical principles, computing methods, and coding throughout the data lifecycle.
2. Understand the context of the data, domain it comes from, data types, questions of interest and methods to solve them.
3. Recognize professional responsibilities as a data analysts: understand ethical responsibilities, understand the concepts of security and privacy of data, be able to articulate misuse and abuse of data.
4. Effectively communicate (verbal, written and visual) in a variety of professional contexts.
5. Function effectively as a member or leader of a team engaged in data management and analysis activities.
6. Apply algorithms used in Machine Learning, Exploratory Data Analysis (EDA), Database Analytics, Big Data, and R modeling and analysis.

ITS 195 (Alpha) IT Program Industry Certification Preparation (3)
3 hours lecture per week

Prerequisite(s): Consent of the instructor, IT Program Coordinator, or Business, Legal, and Technology Department Chairperson.

ITS 195 (alpha) offers current industry certification preparation in areas covered by IT Program coursework.

Upon successful completion of ITS 195 (alpha), the student should be able to:
1. Critically review a certification examination by organizing principles and concepts, purpose, and objectives.
2. Identify test preparation and test taking strategies.
3. Analyze different kinds of test questions (objective, short-answer, essay, and problem solving) in preparation for certification exams.
4. Demonstrate competence and proficiency in mock exams with a minimum of 75% accuracy in all certification areas.

ITS 222 Cyber Attacks and Defense (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ITS 142.
Comment: Information Technology majors must take ITS 222 for a letter grade only.

ITS 222 is an interactive course focusing on enumerating, scanning, hacking, and securing computer systems. Students will gain practical experience in both cyber attack and defense strategies and tactics. ITS 222 emphasizes ethical and legal issues related to cyber attacks and defense.

Upon successful completion of ITS 222, the student should be able to:
1. Identify, describe, and apply current cyber attack, defense incident response, and recovery strategies, tactics, countermeasures, and best practices using current cyber defense tools, methods, and components.
2. Identify the bad actors in cyberspace and compare and contrast their resources, capabilities/techniques, motivations, aversion to risk, and threat potential.
3. List the applicable ethical issues, laws and policies related to cyber defense and digital forensics and describe the major components of each pertaining to the storage and transmission of data and resolution of legal disputes.
4. Examine the architecture of a typical, complex system and identify significant vulnerabilities, risks, and points at which specific security technologies/methods should be employed.

ITS 224 Help Desk Support Practices (3)
3 hours lecture per week

*Prerequisites: A grade of "C" or higher in ITS 124**; and** a grade of "C" or higher in ITS 144 **or** consent of the instructor **or** consent of the Business, Legal, & Technology Department Chairperson.*

ITS 224 introduces the Information Technology student to the key concepts and skills of Help Desk operation. Students will study what a Help Desk is, characteristics of its users, common problems, and tools. Students will learn about how a Help Desk fits into an organization's structure and mission. Students will learn about the protocol and processing of incidents, and the different support levels and methods. Students will learn about knowledge, asset and security management and how important these are to an organization's integrity. Students will have opportunities to both study and practice Help Desk operations in a controlled setting.

Upon successful completion of ITS 224, the student should be able to:
1. Demonstrate professional communication skills needed to isolate and identify Information Technology related problems.
2. Demonstrate professional writing skills used in creating and maintaining management and planning documents in a Information Technology enterprise.
3. Demonstrate the utilization of professional tools used in maintaining and managing an Information Technology enterprise.
4. Demonstrate the utilization of resources and tools used to identify and document reported problems.
5. Demonstrate the ability to troubleshoot and resolve Information Technology related problems.

ITS 227 Web Site Development (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ITS 124, and a grade of "C" or higher in ITS 129, and a grade of "C" or higher in ITS 148, or consent of instructor or Information Technology Program Coordinator, or Business, Legal, & Technology Department Chairperson. .
Recommended Preparation: Knowledge of a higher level object oriented programming language such as Python, Java, C#, C++, PHP, JavaScript.
Comment: Information Technology majors must take ITS 227 for a letter grade only.

ITS 227 introduces the student to Internet applications development. Students will learn concepts, terminology, technologies and techniques for building web applications. Hands-on activities will include how to connect to and navigate the Internet, create World Wide Web pages, interfacing to server side application programming interfaces (APIs) and develop World Wide Web sites. A variety of Internet resources will be demonstrated and subsequently explored by students.

Upon successful completion of ITS 227, the student should be able to:
1. Work with the operating systems to connect to the Internet.
2. Design, develop, and update World Wide Web pages.
3. Write HTML tags using a text editor.
4. Write CSS selectors inline, embedded, and external both using a text editor.
5. Write and modify Javascript code for form validation, document manipulation, and server access using APIs and JSON objects.
6. Publish Web pages to a web server.

ITS 228 Problem Solving and the Programming Process III (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 148 or a grade of "C" or higher in ICS 211, **or** consent of the instructor, the Information Technology program coordinator, or the Business, Legal, & Technology department chairperson.*
Comment: Information Technology majors must take ITS 228 for a letter grade only.

ITS 228 is an advanced-intermediate course using an industry-standard object-oriented programming language and an industry-standard Integrated Development Environment (IDE) to provide viable computing solutions in business and industry. Common algorithms and data structures are covered. Object-oriented programming concepts regarding inheritance are emphasized and realized through the creation of user-defined derived classes that overload and override base classes.

Upon successful completion of ITS 228, the student should be able to:
1. Demonstrate an understanding of fundamental algorithms of computer science, and their associated data structures and problem-solving techniques.
2. Design a correct algorithm for a given problem and describe the algorithm as pseudocode in a given pseudocode syntax.
3. Analyze the worst-case and best-case space and time complexities of a given algorithm.
4. Create a software program for accurately implementing an algorithm specified in pseudocode and implement software objects meeting Abstract Data Type specifications.
5. Compose a problem formulation of a real-world problem using optimally appropriate algorithms and data structures.

ITS 229 (Alpha) Data Driven Solutions (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ICS 129 or ITS 129 **and** a grade of "C" or higher in ITS 149 (any alpha) **or** consent of the instructor, or the Business, Legal, & Technology department chairperson.*
*Recommended Preparation: A grade of "C" or higher in ICS 101 **or** ICS 102.*
Comment: ITS 229 may require additional hardware/software supplies as well as a minimum 16GB external disk drive.
Information Technology majors must take ITS 229 for a letter grade only.

ITS 229 (Alpha) covers hands-on practical skills necessary to the study and practice of database professionals. As technology and databases evolve over time, topics covered in this course may vary in order to 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 class assignments and projects. Successful students will be able to effectively demonstrate use of databases in administrative functions, data mining, and/or data analytics skills at a professional level.

Upon successful completion of ITS 229, the student should be able to:
1. Understand data, its domain, lifecycle, professional responsibilities and ethical use, security and privacy concepts, questions of interest and methods to solve them.
2. Understand data analysis using computing, mathematics, and analytical methods and theories.
3. Install, configure, and apply DBMS functions and tools to optimize tasks and projects useful in current database methods.
4. Effectively communicate analytical solutions (verbally, written, and visually) in variety of professional context.

ITS 229AD Data Driven Solutions: Database Administration (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ICS 129 or ITS 129, **and** a grade of "C" or higher in ITS 149 (any Alpha); **or** consent of the instructor or Business, Legal, & Technology Department Chairperson.*
Recommended Preparation: A grade of "C" or higher in ICS 101 or ICS 102, and ITS 149AD.
Comment: Information Technology majors must take ITS 229AD for a letter grade only.

ITS 229AD covers hands-on practical skills necessary to the study of database
administration and advances students' knowledge of database administration. In ITS 229AD, students will learn how to configure a database server, practice various methods of database backup and recovery, as well as monitor performance tools. Students will also learn how to administer a database efficiently by using automated and advanced security features. This course will also feature extensive study of Structured Query Language (SQL) and its use in administrative tasks.

Upon successful completion of ITS 229AD, the student should be able to:
1. Understand data, its domain, lifecycle, professional responsibilities and ethical use, security and privacy concepts, questions of interest and methods to solve them.
2. Understand data analysis using computing, mathematics, and analytical methods and theories.

3. Install, configure, and apply data storage and computing solutions to optimize data analysis tasks.
4. Effectively communicate analytical solutions (verbally, written, and visually) in variety of professional context.
5. Describe the use of database tasks, tools and functions used in current DBMS applications.
6. Write, test, and troubleshoot event driven DBMS statements and scripts.

ITS 229P Data Driven Solutions: Data Analytics with Python (3)
3 hours lecture per week

Prerequisites: A grade of "C" or higher in ICS 129 or ITS 129, and a grade of "C" or higher in ITS 149 (any Alpha) or consent of instructor or Business, Legal, & Technology Department Chairperson.
*Recommended Preparation: A grade of "C" or higher in ICS 101 **or** ICS 102.*
Comment: ITS 229P may require additional hardware/software supplies as well as a minimum 16GB external disk drive.
Information Technology majors must take ITS 229P for a letter grade only.

ITS 229P covers hands-on practical skills necessary to the study of Python and utilizes the Python programming language to explore the fundamental concepts, constructs, and techniques of data analysis in current database systems including: program structures, algorithms, and Big Data sets.

Upon successful completion of ITS 229P, the student should be able to:
1. Understand data, its domain, lifecycle, professional responsibilities and ethical use, security and privacy concepts, questions of interest and methods to solve them.
2. Understand data analysis using computing, mathematics, and analytical methods and theories.
3. Install, configure, and apply data storage and computing solutions to optimize data analysis tasks.
4. Effectively communicate analytical solutions (verbally, written, and visually) in variety of professional context.
5. Implement and analyze algorithms using the Python Programming language.

ITS 293 Information Technology Program Internship (3)
1 hour lecture, 8 hours internship per week

Prerequisite(s): Consent of instructor or Information Technology Program Coordinator or Business, Legal, & Technology Department Chairperson.
Comment: ITS 293 is repeatable for a maximum of nine credits; however, only three credits can be applied towards the fulfillment of requirements for the AS degree in Information Technology. Information Technology majors must take ITS 293 for a letter grade only.

ITS 293 is a cooperative internship education course involving the student and an employer or the college that integrates classroom learning with supervised, structured practical experience. Employment seeking skills such as resume writing, interviewing, application form filling, proper attitude and attire will be emphasized. Students' interests, ITS program content and the availability of jobs are considered when making internship assignments. It offers the opportunity to further develop workplace soft skills and technical skills.

Upon successful completion of ITS 293, the student should be able to:
1. Perform IT internship job search using appropriate tools; Follow proper etiquette and practice appropriate oral and written communication skills to apply for and secure an internship.
2. Perform activities in a cooperative work environment involving such areas as routine tasks, problem or crisis situations, creative suggestions or initiatives, personal development, work attitudes, and other competencies as determined by the instructor and the employer.
3. Analyze or describe the job assignment in relationship to principles, concepts or procedures covered in the field of study to demonstrate practical work place experience and relate that experience to the ITS course of study.
4. Meet industry standards for the ITS course of study as evidenced by workplace ethics, behavior, team work and interpersonal relations.
5. Identify the personal qualities, work habits, and attitudes that lead to professionalism in the work place.

ITS 344 Small Business Server Administration (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal, &Technology Department Chairperson.*
Comment: ITS 344 may require hardware/software supplies for hands-on activities up to
$50.00.

ITS 344 provides network business server operating system administration concepts and hands-on activities. Installation, configuration and maintenance will be covered in the context of a small business. This course will cover the following topics: overview of Windows and UNIX/Linux servers, installation and configuration including automated installation, remote installation, file systems, hard disk management, NTFS, VMFS, EXT3. ZFS, security, active directory, organization units, containers, user and group account administration, group policies, network printers, network protocols, TCP/IP networking topics, DHCP, static and dynamic IP addressing, WINS, DNS, RRAS, Security, PKI, backup and disaster recovery, resilience, redundancy and fault tolerance, network management, consoles, applications servers, web environment, FTP, web servers, IIS, terminal services, remote administration, physical environment considerations, server virtualization concepts, system monitoring tools, documentation, and application of industry best practices.

Upon successful completion of ITS 344, the student should be able to:
1. Describe the types of small business server operating systems currently in use.
2. Describe the functions of server operating systems.
3. Define general server terminology.
4. Describe the basic features and characteristics of PC processors and their operating systems.
5. Demonstrate basic features of Windows and UNIX/Linux based servers.
6. Install a server operating system and manage a network domain.
7. Install and configure networked printers and other shared peripherals.
8. Create user accounts and groups.
9. Describe basic server security.
10. Administer group policies.
11. Describe various server-based services.
12. Perform administrative duties on a server.
13. Summarize server virtualization concepts, features and considerations.
14. Determine an appropriate physical environment for server location.
15. Describe the importance of documentation and industry best practices.
16. Describe backup and disaster recovery concepts.

ITS 381 (Alpha) Topics in Information Technology (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **and** a grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD **and** a grade of "C" or higher in all prerequisites of the same topic**;** **or** consent of the Business Education Department Chairperson, Information Technology Program Coordinator, or instructor.*
Comment: ITS 381 may require hardware and/or software supplies for hands-on activities up to $150.

ITS 381(Alpha) presents contemporary Information Technology topics. The purpose of ITS 381 is to maintain currency with rapidly changing technologies throughout the world, with an emphasis in Hawai`i's business industry. Topics may include networking (operating systems, hardware, operating systems, etc.); software (program development techniques, object-oriented design, electronic imaging systems, commerce on the Internet, etc.); and others as they emerge.

Upon successful completion of ITS 381, the student should be able to:
1. Describe its history.
2. Define and use its terminology.
3. Describe its concepts and features.
4. Apply skills in the creation and management of a networking and/or software systems.

5. Evaluate the implementation of the hardware and/or software system for efficiency and effectiveness.
6. Apply skills in the software or network installation, configuration, or modification.
7. Describe its relationship to other technologies.
8. Describe its impact on current business practices.

ITS 381B Topics in Information Technology: Mobile Application Development (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **and** a grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD **and** a grade of "C" or higher in all prerequisite courses of the same topic**; or** consent of instructor, Information Technology Program Coordinator or Business, Legal, & Technology Department Chairperson.*

ITS 381B is a project-based course implementing the principles of mobile application design and development. Topics will include mobile app lifecycle; the Model View ViewModel (MVVM) architectural pattern; gesture-based user interface (UI) design and development; animations; page controls and navigation; data handling, storage and backup; maps and geolocation; camera, media and audio; and app packaging, monetization, and publication. Projects will be deployed in a cloud-based hosting facility, such as an app store. Course work will include project conception, design, implementation, and pilot testing of mobile applications. Each step of the process will be journaled and be maintained in a learning log, using a contemporary Weblog tool.

Upon successful completion of ITS 381B, the student should be able to:
1. Synthesize and apply knowledge of the Mobile Application Development Lifecycle and Model View ViewModel (MVVM) architectural pattern.
2. Practice decision making skills by identifying a target business need or problem and design a solution choosing appropriate supporting technology.
3. Develop graphical user interfaces (GUIs) with intuitive layouts combining mobile interface design features.
4. Implement contemporary features of a mobile software development toolkit, including page controls and navigation, maps and geolocation, camera, media and audio.
5. Utilize tools of a software development toolkit to package, monetize, and publish mobile applications.
6. Understand and implement security features and limitations of modern mobile operating systems.
7. Create a working professional portfolio, including a collection of open source code from class projects using a software hosting repository.
8. Maintain a professional engineering weblog (blog) documenting the process, challenges and experience of mobile applications development in a professional capacity.

ITS 381CV Topics in Information Technology: Cloud Virtualization (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 122 **and** a grade of "C" or higher in ITS 124 **and** a grade of "C" or higher in ITS 142 **and** a grade of "C" or higher in ITS 144.*
Comment: Students may need to spend up to $100 for access to online resources or licenses.

The purpose of ITS 381CV is to maintain currency with rapidly and burgeoning information technology area of virtualization throughout the world, with an emphasis in Hawai`i's business industry. Students will learn exactly what virtualization is and what its advantages and disadvantages are. They will learn the process of setting up, configuring, managing, administering, and distributing virtual machines. Students will learn about both virtual servers as well as virtual desktops. They will be exposed to various vendors that provide virtualization.

Upon successful completion of ITS 381CV, the student should be able to:
1. Describe its history.
2. Define and use its terminology.
3. Describe its concepts and features.
4. Apply skills in the creation and management of a networking and/or software systems.

5. Evaluate the implementation of the hardware and/or software system for efficiency and effectiveness.
6. Apply skills in the software or network installation, configuration, or modification.
7. Describe its relationship to other technologies.
8. Describe its impact on current business practices.
9. Explain Data Center Virtualization Concepts and Identify Typical Data Center Challenges.
10. Identify, Explain and Differentiate Virtualization Technologies.
11. Perform Operational Tasks using Virtualization Technologies.
12. Correlate Virtualization Solutions with Common Data Center Business Challenges.
13. Install and Configure Hypervisor Software.
14. Configure Virtual Networks.
15. Configure virtual Storage.
16. Deploy and Administer Virtual Machines.

ITS 381F Topics in Information Technology: Computer Forensics and Investigations (3) Spring
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **and** a grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD**; or** consent of instructor, Information Technology Program Coordinator or Business, Legal, & Technology Department Chairperson.*
*Recommended Preparation: Associate in Science degree in Information Technology or related field **or** equivalent related course work in Information Technology.*
Comment: For hands-on activities ITS 381F may require hardware and/or software supplies costing up to $150. ITS 381F is offered in the spring semester only.

ITS 381F teaches that computers are being used for an ever-growing variety of purposes in our lives, including increasingly for espionage and crime. ITS 381F will cover the ethics of computer use and misuse, how to obtain, secure, and preserve digital evidence, how to correctly conduct computer investigations, and the legal issues involved in computer investigations.

Upon successful completion of ITS 381F, the student should be able to:
1. Use correct terminology related to computer forensics and investigations.
2. Discuss the ethical issues involved in computer crime and investigations.
3. Discuss the applicable laws and legal issues involved in computer crime and investigations.
4. Use computer forensics tools to acquire a forensic image of a computer in accordance with the requirements and best practices of digital evidence.
5. Describe the differences in acquiring and analyzing data from Macintosh, Windows, Linux/UNIX, and mobile devices.
6. Use compute forensics tools to acquire and analyze digital evidence in a controlled environment.
7. Describe the importance and methods of live acquisition of data.
8. Discuss the types of evidence available in graphics files.
9. Discuss the types of evidence available from email.
10. Write a forensic investigation report.
11. Discuss methods of and issues related to network forensics.

ITS 381M Topics in Information Technology: Mobile Application Development (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **and** a grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD **and** a grade of "C" or higher in all prerequisites of the same topic**; or** consent of instructor, Information Technology Program Coordinator or Business, Legal, &Technology Department Chairperson.*

ITS 381M is a project-based course implementing the principles of mobile application design and development. Topics will include mobile app lifecycle; the Model View View Model (MVVM) architectural pattern; gesture-based user interface (UI) design and development; animations; page controls and navigation; data handling, storage and backup; maps and geolocation; camera, media and audio; and app packaging, monetization, and publication. Projects will be deployed in a cloud-based hosting facility, such as an app store. Course work will include project conception, design, implementation, and pilot testing of mobile applications. Each step of the process will be journaled and be maintained in a learning log, using a contemporary Weblog tool.

Upon successful completion of ITS 381M, the student should be able to:
1. Synthesize and apply knowledge of the Mobile Application Development Lifecycle and Model View View Model (MVVM) architectural pattern.
2. Practice decision-making skills by identifying a target business need or problem and design a solution choosing appropriate supporting technology.
3. Develop graphical user interfaces (GUIs) with intuitive layouts combining mobile interface design features.
4. Implement contemporary features of a mobile software development toolkit, including page controls and navigation, maps and geolocation, camera, media and audio.
5. Utilize tools of a software development toolkit to package, monetize, and publish mobile applications.
6. Understand and implement security features and limitations of modern mobile operating systems.
7. Create a working professional portfolio, including a collection of open source code from class projects using a software-hosting repository.
8. Maintain a professional engineering weblog (blog) documenting the process, challenges and experience of mobile applications development in a professional capacity.

ITS 381OS Small Business Server OS Administration (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 142 **and** a grade of "C" or higher in ITS 144**; or** consent of instructor, Information Technology Program Coordinator or Business Education Department Chairperson.*
Comment: Course materials, supplies, licenses for ITS 381OS may cost approximately
$100.

The purpose of ITS 381OS is to maintain currency with rapidly changing technologies network business server operating system administration concepts throughout the world, with an emphasis in Hawai`i's business industry by using current Web server technologies such as IIS and Apache. Installation, configuration and maintenance will be covered in the context of a small business. This course will cover the following topics: overview of Network servers, installation and configuration including automated installation, remote installation, file systems, hard disk management, security, directory services, user and group account administration, network services, network protocols, TCP/IP networking topics, static and dynamic IP addressing, Remote Access, security protocols, backup and disaster recovery, availability, redundancy, and fault tolerance, network management, application servers, web environment, terminal services, remote administration, physical environment considerations, server virtualization concepts, system monitoring tools, documentation, and application of industry best practices.

Upon successful completion of ITS 381OS, the student should be able to:
1. Describe its history.
2. Define and use its terminology.
3. Describe its concepts and features.
4. Apply skills in the creation and management of a networking and/or software systems.
5. Evaluate the implementation of the hardware and/or software system for efficiency and effectiveness.
6. Apply skills in the software or network installation, configuration, or modification.
7. Describe its relationship to other technologies.
8. Describe its impact on current business practices.
9. Describe the types of small business server operating systems currently in use and demonstrate their basic features.
10. Describe the functions of server operating systems to include memory and process management.

11. Define general server and operating system terminology and concepts such as privileged and non-privileged states.
12. Install and administrate a server operating system, creating users accounts and groups, configuring various network services, and configuring a network domain including group policies.
13. Describe basic server security, backup, and disaster recovery concepts.
14. Summarize server virtualization concepts, features and considerations.
15. Determine an appropriate physical environment for server location.
16. Describe the importance of documentation and industry best practices.

ITS 381RF Computer Incident Response and Forensics (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS122 **or** a grade of "C" or higher in ITS 324 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Department Chairperson.*
Comment: Letter grade only. ITS 381RF may not be audited. ITS 381RF may not be taken credit/no credit.

ITS 381RF addresses a contemporary Information Security need. Even the best maintained and defended networks are vulnerable to intrusion incidents. This course teaches computer forensics principles based around the purpose of enabling incident response actions in a business network environment. Building off a fundamental understanding of information security concepts, students will learn best practices for detecting, analyzing, and handling malicious activity. Topics include Linux forensics, Windows forensics, disk and memory forensics, malware triage, network forensics, threat modeling, analysis techniques, and incident response procedures.

Upon successful completion of ITS 381RF, the student should be able to:
1. Describe appropriate measures to be taken should a system compromise occur.
2. Describe different types of attacks and their characteristics.
3. Identify the major concepts in modern operating systems and the basic security issues in OS design and implementation.
4. Describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.

ITS 381SF Topics in Information Technology: Salesforce Administration (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 224 **and** a grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD **and** a grade of "C" or higher in all prerequisites of the same topic; **or** consent of the Business Education Department Chairperson, Information Technology Program Coordinator, or instructor.*
Comment: ITS 381SF may require practice exams costing approximately $40. ITS majors must take all ITS courses for a letter grade.

ITS 381SF is a project-based course providing full training in administering a Salesforce organization, including configuration and setup, object manager and lightning app builder, sales and marketing applications, service and support applications, productivity and collaboration, data and analytics management, and workflow/process automation.
Upon successful completion of ITS 381SF, the student should be able to:
1. Describe its history.
2. Define and use its terminology.
3. Describe its concepts and features.
4. Apply skills in the creation and management of a networking and/or software systems.
5. Evaluate the implementation of the hardware and/or software system for efficiency and effectiveness.
6. Apply skills in the software or network installation, configuration, or modification.
7. Describe its relationship to other technologies.
8. Describe its impact on current business practices.
9. Implement security controls for the Salesforce CRM.
10. Configure sales and marketing applications.
11. Configure service and support applications.

12. Implement features to aid productivity and collaboration.
13. Create tools for data and analytics management.

ITS 382 (Alpha) Topics in Information Technology Cyber Security Technologies (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 222 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 382 (Alpha) may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 382 (Alpha) presents contemporary Information Technology Cyber Security Technologies topics, which may include various security techniques, risk threat and mitigation, forensics, ethical hacking and others as they emerge. The purpose of ITS 382 (Alpha) is to maintain currency with rapidly changing cyber security technologies throughout the world, with an emphasis in Hawai`i's business industry.

Upon successful completion of ITS 382 (Alpha), the student should be able to:
1. Describe appropriate measures to be taken should a system compromise occur.
2. Describe different types of attacks and their characteristics.
3. Identify the major concepts in modern operating systems and the basic security issues in OS design and implementation.

ITS 382PY Topics in Information Technology Cyber Security Technologies: Python for Cyber Security (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 222 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 382 (Alpha) may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 382PY addresses the need for security practitioners to continuously learn new techniques and create new tools to combat ever changing cyber threats. This class will teach students to use the versatile and efficient programming language Python to build custom offensive tools for use in everyday cyber security penetration testing, forensics analysis, and network scanning.

Upon successful completion of ITS 382 (Alpha), the student should be able to:
1. Describe appropriate measures to be taken should a system compromise occur.
2. Describe different types of attacks and their characteristics.
3. Identify the major concepts in modern operating systems and the basic security issues in OS design and implementation.
4. Identify operating system functions most vulnerable to cyber security threats.
5. Describe penetration testing and common forensics analysis functions for cyber security.
6. Write Python programs for performing (1) penetration testing, (2) forensics analysis functions, and (3) network scanning.

ITS 382RF Topics in Information Technology: Incident Response and Forensics (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 122 **or** a grade of "C" or higher in ITS 324 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 382RF may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 382RF addresses a contemporary Information Cyber Security need in forensics and incident response. Even the best maintained and defended networks are vulnerable to intrusion incidents. ITS 382RF teaches computer forensics principles based around the purpose of enabling incident response actions in a business network environment. Building off a fundamental understanding of information security concepts, students will learn best practices for detecting, analyzing, and handling malicious activity. To assist students in to maintaining currency with rapidly changing cyber security technologies, topics may include Linux forensics, Windows forensics, disk and memory forensics, malware triage, network forensics, threat modeling, analysis techniques, and incident response procedures

Upon successful completion of ITS 382RF, the student should be able to:
1. Describe appropriate measures to be taken should a system compromise occur.
2. Describe different types of attacks and their characteristics.
3. Identify the major concepts in modern operating systems and the basic security issues in OS design and implementation.
4. Describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings.

ITS 387 (Alpha) Topics in Information Technology Web Technologies (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 200 level course or higher **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Recommended Preparation: Knowledge of HTML.
Comment: ITS 387 may require hardware and/or software supplies for hands on activities up to $100. ITS majors must take all ITS courses for a letter grade.

ITS 387 (Alpha) presents contemporary Information Technology Web Technologies topics, which may include various web development languages, rapid development tools, web application development, web and database connectivity and others as they emerge. The purpose of ITS 387 is to maintain currency with rapidly changing web technologies throughout the world, with an emphasis in Hawaiʻi's business industry.

Upon successful completion of ITS 387 (Alpha), the student should be able to:
1. Describe its history.
2. Define and use its terminology
3. Describe its concepts and features.
4. Evaluate the implementation of the software system for efficiency and effectiveness.
5. Apply skills in the software creation, installation, configuration, or modification.
6. Describe its relationship to other technologies.
7. Describe its impact on current business practices.

ITS 387J Dynamic HTML (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 227 **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 387J may require hardware and/or software supplies for hands on activities up to $100. ITS majors must take all ITS courses for a letter grade.
Coursework will require the use of a flat ASCII editor such as Notepad++ or Brackets. Students will implement Javascript libraries such as Jquery in websites, creating dynamic sites that are responsive to user input.

ITS 387J expands on the contemporary Information Technology Web Technology skill sets of HTML, CSS (Cascading Style Sheets), and Javascript. To assist students in maintaining currency in rapidly changing technologies, ITS 387J focuses on streamlined coding for design, dynamic content, and interactivity. Students will learn how to create Cascading Style Sheets that both control the layout and design of entire websites using a minimal amount of code. Students will learn how to create Dynamic HTML (DHTML) that changes both the content and format of Web pages depending on user input.

Upon successful completion of ITS 387J, the student should be able to:
1. Describe its history.
2. Define and use its terminology
3. Describe its concepts and features
4. Evaluate the implementation of the software system for efficiency and effectiveness.
5. Apply skills in the software installation, configuration, or modification.
6. Describe its relationship to other technologies.
7. Describe its impact on current business practices.
8. Create and debug Javascripts for Web pages.
9. Use the HTML Document Object Mode(DOM).
10. Create DHTML Web pages based on the end user's input and environmental variables.
11. Hide and show Web page elements depending on the end user's input using CSS and Javascript.
12. Insert, modify, and delete Web content dynamically using CSS and Javascript.
13. Scale content in Web pages.
14. Animate elements on a Web page.

ITS 387P Programming Database Driven Websites (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in any ITS 200 level course or higher **or** Consent of instructor **or** Consent of Information Technology Program Coordinator **or** Consent of Business, Legal & Technology Education Department Chairperson.*
Recommended Preparation: Knowledge of HTML.
Comment: ITS 387P is letter grade only. A modern computer is recommended.

The purpose of ITS 387P is to maintain currency with rapidly changing website technologies throughout the world, with an emphasis in Hawai'i's business industry. Websites have become the standard medium for exchanging data between users and organizations, as well as between users. Websites interface user client-side browsers to organizational databases. ITS387P is a project-based course where students can expand upon their knowledge using the most common client side programming languages as well as the most common server side scripting language and database technology in use by organizations today. Projects will include writing client side programs in HTML, JavaScript, jQuery and Angular JS, as well as server side programs written in PHP interfacing to SQL databases. Students also learn how to configure WordPress websites interfacing server side SQL databases.

Upon successful completion of ITS 387P, the student should be able to:
1. Describe its history.
2. Define and use its terminology.
3. Describe its concepts and features.
4. Evaluate the implementation of the software system for efficiency and effectiveness.
5. Apply skills in the software creation, installation, configuration, or modification.
6. Describe its relationship to other technologies.
7. Describe its impact on current business practices.
8. Create responsive client-side applications utilizing state-of-the-art JavaScript and CSS frameworks.
9. Create and compare server side Application Programmer Interfaces (APIs) utilizing contemporary scripting languages and state-of-the-art backend frameworks.
10. Create custom plug-ins for a contemporary content management system.
11. Demonstrate the steps for creating and bringing a website online.

ITS 388 (Alpha) Topics in Information Technology: Programming Technologies (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ITS 228 **and** *a grade of "C" or higher in ITS 229AD*; **or** *consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Recommended Preparation: Knowledge of any higher level programming language such as Python, Java, C#, C++, PHP, JavaScript.
Comment: ITS 388 may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 388 (Alpha) presents contemporary Information Technology Programming Technologies topics in various programming languages, rapid development tools, app development, database connectivity and others as they emerge. The purpose of ITS 388 (Alpha) is to maintain currency with rapidly changing programming technologies throughout the world, with an emphasis in Hawai`i's business industry.

Upon successful completion of ITS 388 (Alpha), the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such as strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling special cases such as program errors.
7. Examine the security issues that exist in the programming language.

ITS 388AL Topics in Information Technology: Programming Technologies – Assembly Language Programming (3)
3 hours lecture per week

Prerequisite(s): A grade of "C" or higher in ITS 228 and a grade of "C" or higher in ITS 229AD; or **or** *consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Recommended Preparation: Knowledge of any higher level programming language such as Python, Java, C#, C++, PHP, JavaScript.

ITS 388AL, a simulation-based course, cover microprocessor register level architecture and the assembly language for programming microprocessors. Topics will include instruction set architectures, machine level programming, processor design, memory management and input-output systems. Also covered is how higher-level languages translate to assembly language as well as other components of a computer system, such as I/O, DMA and serial communication.

Upon successful completion of ITS 388AL, the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such as strings, lists, and dictionaries.
3. Utilize arrays, methods, and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Identify and describe the purpose of each microprocessor bus and central processing unit (CPU) register and their relationship to the instruction execution cycle.
9. Write programs that read operands from memory, compute arithmetic expressions, and store results into memory.
10. Write programs that use indirect addressing modes, perform block moves and manipulate strings.
11. Write programs that call subprograms, pass arguments and link to external library routines using the Microsoft Assembler (MASM) and linker.

ITS 388AP Topics in Information Technology: Advanced Python Programming (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 228 **or** equivalent **or** consent of the Business, Legal, and Technology department chairperson, or consent of the Information Technology program coordinator, or instructor.*
Comment: ITS 388AP may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 388AP addresses the need for IT professionals to have knowledge and proficiency in a commonly used and powerful programming language. This class will teach students the advanced usage of the versatile and efficient programming language Python to build, test, and debug graphical user interfaces, network applications, and tools for use in everyday computer security.

Upon successful completion of ITS 388AP, the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such as strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Write advanced Python programs to build, test, and debug (1) graphical user interfaces, (2) network applications, and (3) tools for use in everyday computer security.

ITS 388C Topics in Information Technology: Application Development in C# (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 228 **or** a grade of "C" or higher in ITS 229AD **or** consent of instructor, the Information Technology Program Coordinator or the Business, Legal & Technology Education Department Chairperson.*
Comment: Letter grade only. ITS 388C may not be audited. ITS 388C may not be taken credit/no credit.

ITS 388C provides a controlled, structured environment for the student to experience the entire sweep of activities necessary to create and deploy a modern, non-trivial application from end to end.

Upon successful completion of ITS 388C, the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling for special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Diagram, analyze, and participate in a large-scope programming project.

ITS 388J Topics in Information Technology: Application Development in Java (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 228 **or** a grade of "C" or higher in ITS 229AD **or** consent of instructor, the Information Technology Program Coordinator or the Business, Legal & Technology Education Department Chairperson.*
Comment: Letter grade only. ITS 388J may not be audited. ITS 388J may not be taken credit/no credit.

ITS 388J provides a controlled, structured environment for the student to experience the entire sweep of activities necessary to create and deploy a modern, non-trivial application from end to end.

Upon successful completion of ITS 388J, the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling for special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Diagram, analyze, and participate in a large-scope programming project.

ITS 388LX Topics in Information Technology: Programming Technologies - Linux (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 228 **and** a grade of "C" or higher in ITS 229AD**; or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Recommended Preparation: Knowledge of any higher level programming language such as Python, Java, C#, C++, PHP, JavaScript.
Comment: ITS 388 may require hardware and/or software supplies for hands-on activities up to $100. Information Technology majors must take all ITS courses for a letter grade.

ITS 388LX covers the principles of the Linux operating system and its application in current industry. Topics will include: Linux History, System Management, User Management, File Systems, Software and Processes, TCP/IP Networking, DNS, and Shell Scripting.

Upon successful completion of ITS 388LX, the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Apply skills to manage users and access.
9. Apply skills to manage file systems.
10. Apply skills to manage software and processes.
11. Apply skills to configure TCP/IP networking.
12. Apply skills to automate tasks using shell scripts.

ITS 388PY Topics in Information Technology: Python Programming (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 227 **and** a grade of "C" or higher in ITS 228 **and** a grade of "C or higher in ITS 229AD**; or** consent of instructor or Information Technology Program Coordinator.*
*Recommended Preparation: Associate in Science degree in Information Technology program **or** Associate in Science degree in related field **or** equivalent related course work in Information Technology.*
Comment: ITS 388PY may require hardware supplies up to $100.00 for hands-on activities. Please budget your time to use the BLT Lab computers if you do not have access to computers with broadband access outside of the lab.

ITS 388PY covers the essentials of the Python programming language (data types, data structures, if/if-else statements, looping, functions and exceptions). To assist students in maintaining currency with the rapidly changing programming technologies ITS 388PY goes into depth in certain areas such as arrays, graphing, objects and classes, and GUI programming. The Python programming language can be used in Web Development and also for data access, analysis, and visualization.

Upon successful completion of ITS 388PY the student should be able to:
1. Use an appropriate programming environment to design, code, run and debug computer programs.
2. Work with numbers and common data type such strings, lists, and dictionaries.
3. Utilize arrays, methods and classes.
4. Practice solving problems using program structures utilizing decisions and loops and data structures such as list, tuples, and dictionaries.
5. Use appropriate libraries to access classes and methods.
6. Use exception handling special cases such as program errors.
7. Examine the security issues that exist in the programming language.
8. Use the Python programming language to create business applications.

ITS 389 (Alpha) Topics in IT Data Driven Solutions (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 229 (alpha); **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 389 may require hardware and/or software supplies for hands-on activities up to $100.

ITS 389 (Alpha) provides students the opportunity to maintain currency within the rapidly changing environment that is currently occurring in the Data Science and Data Analytics sectors in Hawaii and in the world. 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 class assignments and projects. Successful students will be able to effectively demonstrate use of data-driven solutions in administrative functions, data mining, and/or data analytics skills at a professional level.

Upon successful completion of ITS 389 (Alpha), the student should be able to:
1. Define and demonstrate best practices in data management and storage.
2. Describe data architecture modeling and design methods.
3. Define best practices in data governance and security.
4. Describe the impact of data-driven solutions on current business practices.

ITS 389BD Topics in Information Technology: Database Analytics: Big Data and NoSQL (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 229AD **or** consent of the instructor or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 389BD may require additional hardware/software supplies as well as a minimum 16GB external disk drive. Information Technology majors must take ITS 389BD for a letter grade only.

ITS 389BD, while presenting a contemporary Information Technology Database Technology, introduces students to basic technology (algorithms, architectures, systems) in connection with large-scale data management and information extraction techniques for big data. The course will start by introducing Big Data models, databases and query languages, cover modern distributed database systems and algorithms, and Big Data systems adopted in industry and science applications. Implementation of a data analysis engine on a standalone machine will be covered and students will learn how to build their own database engine for Big Data. The course will also cover critical topics in mining and knowledge discovery of big data, with applications in social analytics, cyber security, and information networks.

Upon successful completion of ITS 389BD, the student should be able to:
1. Describe the history of the technology.

2. Define and use terminology of the technology.
3. Describe concepts and features of the technology.
4. Evaluate the implementation of the database system for efficiency and effectiveness.
5. Apply skills in the database installation, configuration, or modification.
6. Describe the relationship of this technology to other technologies.
7. Describe the impact of this technology on current business practices.

ITS 389C Topics in Information Technology Database Technology: Cloud (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 229AD **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
*Recommended Preparation: ICS 100 **or** ICS 101.*
Comment: ITS 389C may require hardware and/or software supplies for hands-on activities up to $100.

ITS 389C advances the students' knowledge of database technology by adding the advantages, complexities, and new security concerns of current cloud hosting systems such as Amazon Web Service (AWS). To assist students in maintaining currency with rapidly changing database technologies ITS 389C will teach students how to design, create, deploy, secure, administer, extend, backup, and recover databases in a virtualized remote hosting system.

Upon successful completion of ITS 389C, the student should be able to:
1. Describe the history of the technology.
2. Define and use terminology of the technology.
3. Describe concepts and features of the technology.
4. Evaluate the implementation of the database system for efficiency and effectiveness.
5. Apply skills in the database installation, configuration, or modification.
6. Describe the relationship of this technology to other technologies.
7. Describe the impact of this technology on current business practices.
8. Design databases to be deployed into a virtualized remote hosting system, such as Amazon Web Services (AWS).
9. Create databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
10. Deploy databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
11. Secure databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
12. Administer databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
13. Extend databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
14. Backup databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).
15. Recover databases in a virtualized remote hosting system; such as Amazon Web Services (AWS).

ITS 389DA Database Administration (3)
3 hours lecture per week

*Prerequisite(s): A grade of "C" or higher in ITS 229 (alpha); **or** ITS 149 (alpha); **or** consent of instructor, Information Technology Program Coordinator or Business, Legal & Technology Education Department Chairperson.*
Comment: ITS 389DA may require hardware and/or software supplies for hands-on activities up to $100.

ITS 389DA will feature contemporary database Administration best practices. Students will learn how to configure a database server, practice various methods of database backup and recovery, as well as monitor performance tools. Students will also learn how to administer a database efficiently by using automated and advanced security features. This course will also feature extensive study of Structured Query Language (SQL) and its use in administrative tasks. The purpose of ITS 389DA is to maintain currency within the rapidly changing environment that is currently occurring in Database Administration.

Upon successful completion of ITS 389 (Alpha), the student should be able to:
1. Define and demonstrate best practices in data management and storage.
2. Describe data architecture modeling and design methods.
3. Define best practices in data governance and security.

4. Describe the impact of data-driven solutions on current business practices.
5. Configure a database server and implement best practices in database security, modeling, backup and recovery, as well as monitor performance tools.