## **Notice of Meeting**

#### **UNIVERSITY OF HAWAI'I**

#### BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS

Members: Regents Tagorda (Chair), Acopan (Vice-Chair), Bal, Kudo, Nahale-a, Sullivan, and Westerman

**Date:** Thursday, February 14, 2019

**Time:** 8:45 a.m.

Place: University of Hawai'i at Mānoa

Information Technology Building 1st Floor Conference Room 105A/B

2520 Correa Road

Honolulu, Hawai'i 96822

#### <u>AGENDA</u>

- I. Call Meeting to Order
- II. Approval of Minutes of the November 1, 2018 Meeting
- III. Public Comment Period: All written testimony on agenda items received after posting of this agenda and up to 24 hours in advance of the meeting will be distributed to the board. Late testimony on agenda items will be distributed to the board within 24 hours of receipt. Written testimony may be submitted via US mail, email at <a href="mailto:bor@hawaii.edu">bor@hawaii.edu</a>, or facsimile at 956-5156. Individuals submitting written testimony are not automatically signed up for oral testimony. Registration for oral testimony on agenda items will be provided at the meeting location 15 minutes prior to the meeting and closed once the meeting begins. Oral testimony is limited to three (3) minutes. All written testimony submitted are public documents. Therefore, any testimony that is submitted verbally or in writing, electronically or in person, for use in the public meeting process is public information and will be posted on the board's website.

# IV. Agenda Items

- A. For Review and Recommend Board Approval
  - 1. Establishment of a Provisional Bachelor of Arts Degree in Creative Media at the University of Hawai'i West O'ahu
  - 2. Establishment of a Provisional Bachelor of Science Degree in Natural Science at the University of Hawaiii West Oʻahu
- B. For Information and Discussion
  - 1. Academic Program Actions Report for Academic Year 2017-2018
  - 2. Hawai'i P-20 Partnerships for Education Presentation on Early College and Pathways to the University of Hawai'i
  - 3. Overview of Zero-Cost Textbooks Initiative
  - 4. University of Hawai'i Online Degree Program Progress Report

# V. Adjournment

# DISCLAIMER – THE FOLLOWING ARE DRAFT MINUTES AND ARE SUBJECT TO CHANGE UPON APPROVAL

#### **MINUTES**

# BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS MEETING

#### **NOVEMBER 1, 2018**

# I. CALL TO ORDER

Committee Chair Michelle Tagorda called the meeting to order at 10:30 a.m. on Thursday, November 1, 2018, at the University of Hawai'i at Mānoa, Information Technology Building, 1<sup>st</sup> Floor Conference Room 105A/B, 2520 Correa Road, Honolulu, Hawai'i 96822.

<u>Committee members in attendance</u>: Committee Chair Michelle Tagorda; Committee Vice Chair Brandon Marc Higa; Regent Eugene Bal III; Regent Ben Kudo.

Committee members excused: Regent Jan Sullivan.

Others in attendance: Board Chair Lee Putnam; Board Vice Chair Wayne Higaki; Regent Simeon Acoba; Regent Michael McEnerney; Regent Randy Moore; Regent Douglas Shinsato; Regent Ernest Wilson Jr.; Regent Stanford Yuen (ex officio committee members); President/Interim UH-Mānoa (UHM) Chancellor David Lassner; Vice President for Administration Jan Gouveia; Vice President for Community Colleges John Morton; Vice President for Legal Affairs/University General Counsel Carrie Okinaga; Vice President for Academic Planning and Policy Donald Straney; Vice President for Research and Innovation Vassilis Syrmos; Vice President for Budget and Finance/Chief Financial Officer Kalbert Young; Interim UH-Hilo (UHH) Chancellor Marcia Sakai; UH-West Oʻahu (UHWO) Chancellor Maenette Benham; UHM Vice Chancellor for Research/Interim Vice Chancellor for Academic Affairs Michael Bruno; Executive Administrator and Secretary of the Board of Regents (Board Secretary) Kendra Oishi; and others as noted.

# II. APPROVAL OF MINUTES OF THE SEPTEMBER 6, 2018 MEETING

Committee Vice Chair Higa moved to approve the minutes of the September 6, 2018, meeting, seconded by Regent Bal, and the motion carried unanimously.

## III. PUBLIC COMMENT PERIOD

Board Secretary Oishi announced that the Board Office received no written testimony.

The following provided oral testimony:

 Stuart Martin, a UHM student and a licensed pilot, provided oral testimony in support of the proposed aeronautical sciences program at UHH. He attended ATP Flight School in Arizona because there were no options in Hawaii. Many of his peers are going to the mainland because the flight schools are better and the local schools lack structure. Having a program in Hawai'i would help keep the money here and provide an opportunity to other people who are interested in becoming a pilot.

Regent Kudo arrived at 10:33 a.m.

# IV. AGENDA ITEMS

# A. For Information and Discussion

# 1. Update on Systemwide Enrollment Management and Enrollment Management Reports

VP Straney, UHM Chancellor Lassner, UHH Chancellor Sakai, UHWO Chancellor Benham, and VP Morton, provided an update on enrollment management for each of their respective units. The reports included historical enrollment figures, challenges and factors affecting enrollment, WICHE forecasts of high school graduates, college participation rates of Hawai'i public high school graduates, UH community college transfers to four-year campuses, and goals and action strategies for enrollment growth.

Noted in the general presentation was that there is a correlation between recession and enrollment; UH's challenge is to demonstrate value in college attendance; and high school graduates in Hawai'i are expected to increase by 1,800 graduates from 2018 to 2025 while high school graduates in Western states are forecast to decline, thereby creating an increase in competition.

A question was raised regarding the mechanics of implementing the freshmen Common Book requirements into the curriculum. Chancellor Lassner explained that other universities have utilized the Common Book strategy to build bonds and connections among students and with faculty.

Questions were raised regarding whether there was someone at the system level dedicated to enrollment management issues and whether the enrollment count only includes full-time students. President Lassner explained each unit has an individual dedicated to enrollment management, and VP Straney has oversight for the system. VP Straney indicated that the enrollment numbers includes the total headcount of all students registered in credit courses, both full-time and part-time.

Comments were made regarding the importance of taking into consideration the method of educational delivery, meeting the needs of non-traditional students, the need to review real-time data to help to anticipate a decline in enrollment so that administration can respond quickly to mitigate or minimize the impact, and expanding online programs to reach a wider range of potential students with unique offerings. VP Straney responded that some of these features can be added to future reports, and noted that the community colleges are proactively exploring new student populations and those efforts are working their way up into the four-year campuses.

A question was raised regarding what the term "modified graduation requirements" means at UHH, and the number of modifications that occur in an academic year. Chancellor Sakai explained that the process involves reviewing courses a student has

successfully completed to determine if a particular course would fulfill requirements. Interim Vice Chancellor for Academic Affairs Ken Hon noted that approximately 500 course modifications were processed annually. Administration is encouraging faculty to review degree programs and overlapping courses to eliminate unnecessary course modifications and simplify the degree pathway.

A question was raised regarding the reason for the significant drop in mainland transfer students at UHH. Chancellor Sakai replied that mainland transfers decrease every year, but this year the decrease was larger and she believes the Kīlauea eruptions were a factor.

Questions were raised regarding the EAB enrollment campaign and its intended targets. Chancellor Lassner responded that every campus sets challenging enrollment and conservative operational budget goals. VP Straney noted that EAB enrollment-related services are tailored to the campus. Each campus was provided analytical tools to set targets to model enrollment by category and translate that into projected net revenue. Chancellor Sakai explained the EAB campaign targeted accepted freshmen who had not yet enrolled, but it is too early to determine its success. The initial targets were set to a specific enrollment number that UHH had previously achieved and what was required to retain existing students until graduation, with input from admissions and the enrollment management groups.

A question was raised regarding efforts made for marginal students that may require special attention or those who encounter academic problems and do not return. VP Straney responded that each campus has been developing strategies such as first year experience programs to match students with student affairs, extracurricular support, and learning support for courses. Both UHM and UHH started a learning assistance program in Science, Technology, Engineering, and Mathematics (STEM) because of high failure rates in introductory courses and hired upper-level students that had already taken and passed the course. He added that the university does not want to just retain students, it wants them to succeed in their courses, even if it results in a reduced curriculum workload.

A question was raised regarding whether Early College Program (ECP) students are included in the total enrollment numbers. VP Straney explained that ECP students are included in total enrollment but are not part of the first-time freshmen, transfer, or continuing totals. ECP students who subsequently enroll at UH campuses are counted and defined as first-time freshmen, even if they have earned credits.

Questions were raised regarding whether the 2018 first-time freshmen count at UHWO being lower than 2017, 2016, and 2015 was cause for concern; and how the 14.2% change in first-time freshmen was derived. Chancellor Benham explained that there had been a large number of students funded through one-time grants over the last few years which increased the numbers. Administration is working on institutionalizing programs in order to sustain enrollment growth. Chancellor Benham noted that she would get back to the committee regarding the calculations of the percentage change in first-time freshmen.

Concern was expressed that it was unrealistic to set an enrollment of 60,000, simply because it was a previous peak enrollment that was reached during an economic downturn. President Lassner added that the university is being extremely intentional and analytical about shaping how it manages enrollment.

A request was made for a more detailed presentation on distance learning in the future that shows the types of degrees and certificates each campus is offering and how online programs are being marketed to reach other market segments. VP Straney responded that a presentation on distance learning will be provided.

A comment was made regarding the need for more data on students from independent schools to inform enrollment management. VP Straney responded that Hawai'i P-20 could assist.

Comments were made regarding working with the Department of Education (DOE) to ensure there are fewer students needing remedial math and English and having more robust college counseling at the DOE schools. VP Straney responded that a presentation is forthcoming by Hawai'i P-20 on the 6-16 College and Career Guidance Program designed to bring high school counselors and college advisors together.

A comment was made regarding course scheduling and facilities use as being a factor in student retention and it was suggested that administration utilize the STAR system to predict what students will need and when. VP Straney responded that administration is taking that into consideration and moving forward in that direction.

A question was raised regarding whether there were individuals assigned to high schools with responsibility for achieving enrollment targets. VP Straney explained that campuses are focusing on specific high schools, but was unsure if there are specific targets by high school.

Committee Chair Tagorda agreed with comments from committee members regarding the effort made over the years to increase enrollment and the collaboration that is occurring among the campuses. Sharing what works and does not work helps the university system function more successfully.

The committee went into recess at 12:28 p.m., and the meeting resumed at 12:41 p.m.

# 2. Academic Planning Update

VP Straney noted that the board had received an update on the new integrated planning framework at the August board meeting, which covered many of the elements included in today's presentation. Due to time constraints, he focused on the types of program proposals and indicated that the provisional Aeronautical Sciences, B.S. program at UHH would be considered a capital-intensive proposal and the Engineering Science, B.S. program at UHM would be considered a modification of an existing program proposal. If these programs are approved today and subsequently approved by the full board, campuses can begin recruiting students in fall 2019.

## B. For Review and Recommend Board Approval

# 1. Establishment of a New Provisional Bachelor of Science Degree in Aeronautical Sciences at the University of Hawai'i at Hilo

Chancellor Sakai provided an overview of the provisional Aeronautical Sciences, B.S. program at UHH that was updated to address concerns previously raised by the board. The proposed program was broadened to include concentrations in commercial professional pilot training (CPPT) and commercial aerial information technology (CAIT), and its applications will integrate into UHH's existing strengths in STEM, agriculture, conservation, biology, geography, environmental sciences, marine science, and astronomy.

Chancellor Sakai highlighted data in a 2016 report prepared by the Office of Aerospace Development at the Department of Business, Economic Development & Tourism entitled "Hawai'i's Aerospace Industry – Developing a Strategic Roadmap for Expansion and Diversification" that strategically reviewed Hawai'i's aerospace industry, including its locational assets such as its strategic location, terrain, and existence of resident expertise. The purpose of the report was to develop a roadmap for a sustainable aerospace industry. Eight sectors within the aerospace industry cluster were identified, two of which, civil aviation and unmanned aerial systems (UAS) are a focus of the proposed degree program. Data shows the largest projected growth in pilot demand will be the Asia-Pacific region. The UH Applied Research Laboratory UAS program operates the Pan Pacific UAS Test Range Complex, one of six approved across the country by the Federal Aviation Administration (FAA). UHH has an existing relationship with the FAA which enables them to obtain certificates of waiver or authorization for research and training on a per project basis, which would provide additional privileges for the aerial information technology program. This proposed degree aligns well with UHH's focus on professional programs that prepare students in the workforce and the focus on the application of science in a broad range of fields using tools for information development such as geographic information systems, data visualization, and data science.

Chancellor Sakai shared a <u>video</u> demonstrating how UHH researchers used drones to aid lava monitoring.

Regent McEnerney left at 12:57 p.m.

Chancellor Sakai noted that questions previously raised include why the program should be at UHH, what need does the program fill, and how do they know students will want to enroll. She explained that for the pilot track, there are approximately 200 projected job openings in the next 10 years and 186 replacement positions for an average of 40 positions per year, at an average salary ranging up to \$150,000 for major airline pilots. For the UAS track, demand is more difficult to project. The salary range is estimated to be \$30,000 to \$150,000 per year. Students who graduate from these programs will go through experience pathways for their career objectives and salaries will differ depending on the track.

The 3 +1 format provides flexibility and the 3 years of pilot training can be done at UHH and may be broadcast via distance learning. For the pilot track, a mainland flight school has been identified than can provide the Year 4 pilot training, and if similar operations were to develop in Honolulu, Year 4 could be completed in Hawaii. For the

UAS track, the final year occurs at UHH where students can better complete the academic portion of the program.

The 4-year program at UHH provides 60 credit hours of core aviation courses and 60 credit hours of general education courses. This program would benefit the student by streamlining the time to get a 4-year degree in aviation, allows graduates to avoid the Year 4 cost of college which is approximately \$22,000 of the entire cost of education; reducing cost for flight training in Year 4; and puts them at a competitive advantage for being hired by a major carrier in the future over someone with a 2-year degree. Eighty percent of the Hawaiian Airlines pilot force have 4-year degrees.

Pilots need to earn flight hours before being considered to be hired by major airlines. Hawaiian Air has indicated they are supportive of any program that increases pipeline of pilots into the workforce.

Chancellor Sakai indicated that this program will help students move toward a career that can be highly compensated, both as commercial pilot and operating unmanned aerial vehicles, which is a rapid growth sector in the United States and Hawai'i. UHH projects 20 students per year entering into pilot training cohort, and 10 per year into the UAS cohort. Assuming retention rates mirror general UHH population, the mature program size would be approximately 80 students. The 4<sup>th</sup> year revenue would be \$500K, and expense would be projected at \$350K, which would put UHH in a net positive position. Additional resources will be needed to initially start the program and UHH plans to ask the board for authorization to utilize \$100,000 from the \$12 million in tuition reserves. She added that if UHH had to stop the program, the estimate for the entire cost is \$600,000 net of tuition. The benefits appear to exceed the risk.

A question was raised regarding whether all four years of the UAS track could be done at UHH, with UHH providing all lab experiential opportunities required to get the Federal Aviation Administration license. Chancellor Sakai explained that they could.

Regent Bal noted the expansion of the program to include the added value of the UAS certification pathway, which will expand the program's ability to attract more students. He indicated that airline pilot industry training is largely supported by the Air Line Pilots Association, International (ALPA) and shared forecasts from the ALPA website on hiring of pilots by Boeing and Airbus, the world's two largest aircraft manufacturers. The forecasts show Boeing's prediction of hiring 637,000 pilots in the next 20 years with Airbus' hiring estimate of 562,200 pilots. Looking at the airline industry worldwide, it is conceivable that pilots that go through this program will have tremendous opportunity and potential for employment both in Hawai'i and around the world.

Regent Shinsato left at 1:18 p.m.

Concerns were raised regarding whether entering the memorandum of understanding (MOU) with the flight service provider would place the position of the university in a partnership or joint venture with the flight service provider and therefore, still pose a substantial risk of liability; whether the MOU would be effective with third parties in the event of an unforeseen incident or property damage; and the potential liability of the UAS program.

Board Vice Chair Higaki left at 1:24 p.m.

A question was raised regarding the possibility of individuals with this academic program background expanding into airport management and other aviation operations. Chancellor Sakai responded that there are many employment opportunities, and any career that deals with air space or ground operations could leverage this degree.

Regent Kudo moved to recommend board approval of the new provisional Bachelor of Science in Aeronautical Sciences at UHH, seconded by Regent Bal, and the motion carried unanimously, with Regent Sullivan excused.

# 2. Establishment of a New Provisional Bachelor of Science Degree in Engineering Science at the University of Hawai'i at Mānoa

VC Bruno provided an overview of the provisional Engineering Science Degree, B.S. program at UHM. The proposed program would allow the College of Engineering and the university to be more agile and strategic in the development and deployment of ABET-accredited engineering programs in high-demand areas. There was some concern regarding the marketability of an engineering science degree as opposed to a specialized engineering degree.

Committee Vice Chair Higa moved to recommend board approval of the new provisional Bachelor of Science in Engineering Sciences at UHM, seconded by Regent Bal, and the motion carried with Regent Kudo voting no, and Regent Sullivan excused.

# V. <u>ADJOURNMENT</u>

There being no further business, Committee Chair Tagorda adjourned the meeting with no objections. The meeting was adjourned at 1:47 p.m.

Respectfully Submitted,

Kendra Oishi
Executive Administrator and Secretary
of the Board of Regents

# **West O'ahu Degrees & Concentrations**



**BA Business** Administration

- Accounting
- Facilities Management
- Finance
- **General Business** Administration
- Hospitality & **Tourism**
- Management
- Marketing



BA **Humanities** 

- Creative Media
- English
- Hawaiian-Pacific Studies
- Philosophy
- History Mathematics
  - General Public
    - Justice



**BA Public** Administration

- Community Health \*
- Disaster Preparedness & Emergency Management
- Health Care Administration
- Administration
- Administration



BA **Social Sciences** 

- Anthropology Early Childhood
- Education Economics
- Political Science
- Psychology
- Sociology



**BA Education** 

- Elementary Education
- Middle-Level Education
- Secondary Education



**BAS Applied Science** 

- Computing, Electronics and Networking Technology
- Creative Media
- Culinary Management
- Facilities Management
- Information Security and Assurance
- Information Technology
- **Respiratory Care**
- Sustainable Community Food Systems



BS Natural Sciences

- Applied Mathematics
- Life Sciences
- Health Sciences



BA Creative Media

- General Creative Media
- Design & New Media
- Communications & New Media **Technologies**
- Video Game Design & Development



# **BA in Creative Media**

- Working effectively with UHCCs to foster student success
- Fulfilling State Legislature's vision for UH West Oʻahu
- Setting students up for promising career paths
- Facilitating campus growth



# **BS Natural Science**

- Working effectively with UHCCs to foster student success
- Fulfilling State Legislature's vision for UH West Oʻahu
- Setting students up for promising career paths
- Facilitating campus growth







RECEIVED

January 28, 2019

**MEMORANDUM** 

19 FEB -7 P12:09

TO:

Lee Putnam

Chair, Board of Regents

UNIVERSITY OF HAWA'II PRESIDENT'S OFFICE

VIA:

David Lassner

President

VIA:

Donald O. Straney

Vice President for Academic Planning and Policy

FROM:

Maenette Benham

Chancello

SUBJECT:

Request Approval of a New Provisional Degree, Bachelor of Arts in Creative

Media

#### SPECIFIC ACTION REQUESTED:

It is requested that the Board of Regents approve a new provisional degree, the Bachelor of Arts in Creative Media (BACM), at the University of Hawai'i–West O'ahu.

#### **RECOMMENDED EFFECTIVE DATE:**

Fall 2019

## **ADDITIONAL COST:**

There are initial costs associated with this request. In brief, increased projected enrollment will require additional personnel, and the opening of the new Creative Media building at UH West

Lee Putnam, Chair, Board of Regents January 28, 2019 Page 2 of 5

O'ahu requires additional janitorial services, security, and the cost of utilities and maintenance. New appropriations will be sought from the legislature to meet these needs as the building nears completion and enrollment increases, as described in our proposal.

## **PURPOSE:**

The proposed Bachelor of Arts in Creative Media is designed to be an innovative transdisciplinary degree program that connects the domains of art and design, narrative, information science, and new media technologies. It entails extended study and applied practice in the field to strengthen students' integrative abilities which are necessary for a broad range of careers in government and non-government organizations, educational institutions, technology firms, and private firms. This degree will increase the employability of our students by signaling to employers the program graduates' particular expertise honed from completion of a Creative Media major. The proposed program provides the autonomy and flexibility necessary for the curriculum to be responsive to the needs of a constantly evolving industry. In effect, the degree is geared to prepare its graduates for careers in the local creative sector, which continues to be identified by DBEDT (December, 2018) as a targeted industry in the state.

#### **BACKGROUND:**

Board of Regents Policy 5.201: Instructional Programs states that "The board shall approve the establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president."

In December, 2003, the University of Hawai'i (UH) Board of Regents (BOR) approved the Academy for Creative Media System (ACM), a new system-wide endeavor to advance the "study and production of cinematic (film) and digital media." Across the UH System, campuses would offer certificates, associate's, bachelor's, and, eventually, master's and doctoral degrees in creative media. In 2013, with new financial and FTE support for four new positions and programmatic funding by the State Legislature, UH West O'ahu joined the ACM system-wide partnership.

The mission of UHWO as highlighted in the BOR Integrated Academic and Facilities Plan (IAFP) is to offer students a distinct learning experience focused on 21<sup>st</sup> century skills that prepares them to be innovative community leaders. In particular, the IAFP identifies signature programs that include "creative media, cybersecurity, facilities management, sustainable community food

Lee Putnam, Chair, Board of Regents January 28, 2019 Page 3 of 5

systems and insurance" (p. 8). Creative Media at UH West O'ahu currently exists as two different concentrations housed in two separate majors. Creative Media students earn either a Bachelor of Arts (BA) degree in Humanities or a Bachelor of Applied Science (BAS) degree. The proposed Bachelor of Arts degree in Creative Media would be offered in the newly established Academy for Creative Media—West O'ahu. The degree will:

- Make it easier for students to matriculate from Early College and all seven (7) UH
   Community College media programs into a single Bachelor of Arts degree (instead of
   concentrations in different programs). This clear pathway to a single degree assists our
   accurate accounting of student enrollment, effective advising of students, and efficient
   use of teaching resources.
- Provide a curriculum, different from the current concentrations, that is more responsive
  to changing knowledge and specialized skills in technology and distribution platforms,
  and that transforms the industry and professional practices. Therefore, the flexibility of
  the BACM is that it increases the breadth and depth and number of courses from which
  students can choose.
- 3. Align with UHWO's mission-driven transdisciplinary focus on media/digital technology that combines evolving new media knowledge with traditional disciplines that helps students explore how creative media connects to so many fields. This approach integrates a variety of media domains (design, narrative, technology) that strengthen student skills in their chosen area of expertise through a competency-based curriculum that features direct mentoring from faculty and industry experts. Hence, the CM major would be able to apply their skills in areas they are most interested, e.g., business, healthcare, non-profit, government service, film, marketing and so on.
- Complement other degrees in the system by articulating with community college
  associate degrees and by providing a different focus from UH Mānoa's Creative Media
  degree.

The proposed BACM meets the Integrated Academic and Facilities Plan (IAFP) for West O'ahu that calls for a focus on general degrees that are distinctive, and for degrees that will articulate well with our UH Community Colleges. In accordance with the IAFP, this degree is attentive to community college transfer students. In particular, it builds on the existing articulation agreements across all seven (7) UHCC campuses.

The BACM degree will provide foundational knowledge and equip students with the skills and

Lee Putnam, Chair, Board of Regents January 28, 2019 Page 4 of 5

abilities to pursue a number of career pathways, including those in the state's targeted creative industry sector. A BACM degree will afford students a variety of job opportunities in occupations identified as having a "bright outlook." According to the latest industry sector projections, Creative Media occupations such as web developers, multimedia artists and animators, as well as film and video editors, will continue to increase both locally and nationally over the next decade. In these examples, the average salaries in Hawai'i are well above the \$33,342 considered to be the living wage in Hawai'i, according to the MIT Living Wage Calculator.

There has been a good amount of investment in Creative Media at UHWO. In 2013, the Hawai'i State Legislature, in an effort to support the expansion of the System-wide ACM programs, passed SB 3168 that positioned UH West O'ahu's Creative Media unit "as a cornerstone of the State's development of the Kapolei-West O'ahu region as a hub of Hawai'i's creative media industry." Similarly, HB 1309 recognized the "unique opportunities for digital media industry development in Hawai'i resulting from the groundbreaking of the long-awaited University of Hawai'i-West O'ahu campus in Kapolei . . ." In June 2013, the Governor of Hawai'i signed the State Budget Bill appropriating \$2.1 million dollars to the ACM UH System that included both funding for operational costs and ten (10) positions. UH West O'ahu's Creative Media program was allocated four (4) of those positions and approximately \$500,000, which included funding for the payroll of those four (4) positions and operating costs.

In addition, the 2016 Hawai'i State Legislature approved \$37 million for the design and construction of a Creative Media building at UH West O'ahu. In 2015, the Roy and Hilda Takeyama Family Foundation made a \$1 million commitment to support and advance the mission and priorities of ACM West O'ahu. In spring 2018, the design/build contract for the new 33,000 square foot facility was awarded with a completion date of late-summer 2020. The University broke ground for the new building on January 11, 2019.

The proposed BA in Creative Media will be a signature program at West O'ahu. Its creation is crucial to fulfilling the promise of a tight link between the campus, its regional service area, and workforce demand. This will be accomplished through an applied program that embraces 21<sup>st</sup> century innovation and provides the technical and creative skills needed to serve the West O'ahu region.

#### ACTION RECOMMENDED:

Lee Putnam, Chair, Board of Regents January 28, 2019 Page 5 of 5

It is recommended that the Board of Regents approve a new provisional degree, the Bachelor of Arts in Creative Media, at the University of Hawai'i – West O'ahu.

Attachments:

New Program Proposal for the Bachelor of Arts in Creative Media Appendices

c: Kendra Oishi, Executive Administrator and Secretary to the Board of Regents



# **Program Proposal:**

University of Hawai'i – West O'ahu Bachelor of Arts in Creative Media

January 2019

#### INTRODUCTION AND BACKGROUND

In December 2003, the University of Hawai'i (UH) – Board of Regents (BOR) approved the Academy for Creative Media System (ACM), a new system-wide endeavor to advance the "study and production of cinematic (film) and digital media." With initial funding for 14 new full-time equivalent (FTE) positions from the State Legislature and programmatic funding from the University of Hawai'i Mānoa (UHM) Chancellor's Office, plus generous donations from UH alumni, in January 2004, UHM launched the first of a series of campus-based ACM programs.

Per the approval of the BOR, ACM Mānoa would work to build cross-campus collaborations to deliver a knowledge-based, production-oriented curriculum in creative media. Across the UH System, campuses would offer certificates, associate's, bachelor's, and, eventually, master's and doctoral degrees in creative media. New programs, infrastructure, faculty, and resources would progressively be added via established BOR procedures and processes.

The mission of UHWO as highlighted in the BOR Integrated Academic and Facilities Plan (IAFP) is to offer students a distinct learning experience focused on 21st Century skills that prepares them to be innovative community leaders. In particular, the IAFP identifies signature programs that include "creative media, cybersecurity, facilities management, sustainable community food systems and insurance" (p. 8). In 2013, with new financial and FTE support for four new positions and programmatic funding from the State Legislature, the University of Hawai'i -West O'ahu (UHWO or UH West O'ahu) joined the ACM system-wide partnership.

UHWO Creative Media curriculum <u>currently exists</u> as two different <u>concentrations</u> housed within <u>two separate majors</u>. Students earn either a Bachelor of Arts (BA) degree in Humanities with a concentration in Creative Media or a Bachelor of Applied Science (BAS) degree with a Creative Media concentration. Both degrees offer a college credential when students complete a designated sequence of courses.

We propose a stand-alone Bachelor of Arts degree in Creative Media established in a new Academy for Creative Media -West O'ahu. The single degree will:

- 1) Make it easier for students to matriculate from Early College and all seven (7) UH Community College media programs to a single Bachelor of Arts degree (instead of concentrations in different programs). This clear pathway to a single degree ensures accurate accounting of student enrollment, effective advising of students, and efficient use of teaching resources. (Note: It is no longer strategic nor efficient to grow two separate Creative Media concentrations.)
- 2) Provide a curriculum, different from the current concentrations, that is more responsive to changing knowledge and specialized skills in technology and distribution platforms, and that teaches transformative industry and professional practices. Additionally, the new curriculum targets students who have a passion for using analytical thinking and creativity to produce digital media products. Therefore, the flexibility of the BACM is that it increases the breadth and depth and number of courses students can choose from. (See Introduction, Program Description, and Image 6 to follow.)

- Align with UHWO's mission-driven transdisciplinary focus on media/digital technology that combines evolving new media knowledge with traditional disciplines. This combination goes beyond the current concentration foci by integrating a variety of media domains (design, narrative, technology) and deepening study and practice in each student's chosen area of expertise through a competency-based curriculum that features direct mentoring from faculty and industry experts. Hence, the CM major would be able to apply their skills in areas they are most interested, e.g., business, health care, non-profit, government services, film, marketing and so on. (See Long Range Planning at <a href="https://westoahu.hawaii.edu/longrangeplanning/">https://westoahu.hawaii.edu/longrangeplanning/</a>)
- 4) The BACM at UH West O'ahu complements other degrees in the system by articulating with Community College AA degrees and providing a different tofucs from UH Mānoa's degree.

# Purpose MEETING THE NEEDS OF STUDENTS AND THE FIELD OF PRACTICE

The proposed Bachelor of Arts degree in Creative Media (BACM) addresses the following needs:

- 1. To meet progressively changing professional and industry needs the curriculum has been strengthened to be **responsive** to a fast-moving industry. This degree prepares students for many of the careers included in the Creative Sector category identified by the State of Hawai'i's Department of Business, Economic Development and Tourism (DBEDT) in its 2018 report on "Hawai'i's Targeted and Emerging Industries." The UH System's Hawai'i Industry Sectors tool provides real-time data on job market trends and position openings across the state. This links to the general Hawai'i Industry Sectors website <a href="http://uhcc.hawaii.edu/workforce/index.php">http://uhcc.hawaii.edu/workforce/index.php</a> and this provides data that is specific to one segment of the creative media workforce sector: <a href="http://uhcc.hawaii.edu/workforce/occupation">http://uhcc.hawaii.edu/workforce/occupation</a> profile.php?soc=27-4031
- 2. To align Creative Media with UHWO's transdisciplinary pivot while supporting the University of Hawai'i Board of Regents Intergrated Academic Facilities Plan (IAFP), UH System Strategic Directions, and UHWO Goals. The structure of the degree will move away from a focus primarily on Humanities and toward a new intellectual core field of cutting-edge technology that crisscrosses the arts, computer/digital sciences, social sciences and cultural studies, while also linking with professional practice through engaged scholarship. In keeping with UH West O'ahu's role as delineated in the IAFP, this degree will have a greater emphasis on technical and digital media skills learning than the BA in Creative Media now in place at UH Mānoa. (See Image 7 to follow.)
- 3. To prioritize access to post-secondary education, thereby meeting the needs of current and potential students by strengthening Early College vertical alignment with regional high schools, fine-tuning student transfer from our community colleges, and meeting the professional needs of UHWO Creative Media students through focused degree pathways to a single ACM West Oʻahu BA.

## Discussion of Needs:

## 1. Meet progressively changing professional and industry needs

Job market trends, current professional careers and employment opportunities in this field are rising at a steady rate. Table 1 below is an overview of current and projected opportunities within existing career paths in Hawai'i. It is important to note that this is a cutting-edge field driven by new methods, new thinking, and new skills; hence, new career opportunities for well-prepared students. (See also Appendix A, Occupational Outlook.)

Table 1. Overview of Industry Sector Job Market Trends: Creative Media					
Occupation	# HI State Jobs 2018	Projected 2027			
Audio and Video Equipment Technicians	764	830			
Film and Video Editors	103	157			
Multimedia Artists and Animators	81	103			
Sound Engineering Technicians	72	81			
Web Developers	361	377			

Source: University of Hawai'i System Hawai'i Industry Sectors Database (Retrieved January 2, 2019)

According to the January 2018 issue of *Kapolei Magazine*, there is a gap between Kapolei's population and the number of jobs available in the region. Current data show that Kapolei's working age population consists of a little more than 116,000 residents with about 76,000 jobs in the region (Plasch Econ Pacific LLC, 2016, based on estimates derived from the City and County of Honolulu's Department of Planning and Permitting Annual Report on the Status of Land Use on O'ahu, 2014).

Despite being the fastest growing region in the state, economic development in and around Kapolei has lagged, with about 40 percent of West O'ahu residents commuting into Honolulu for work. That said, the Kapolei Chamber of Commerce has identified creative media as one of the growth industries for West O'ahu. In fact, current efforts to build the State Film Production Studio in our region (perhaps on UHWO campus land) speak to the importance of creative media as an economic driver and career creator in West O'ahu.

Our BACM degree stands ready to meet the employment needs of this industry as it grows in this region and throughout Hawai'i. With a single degree program, the process of placing and monitoring students in suitable internships and community engagement opportunities will be more effective, and the experience, we anticipate, more beneficial. For example, having a single degree with a unified set of requirements will allow the program to more effectively communicate to employers the skills and knowledge base they can expect UHWO's Creative Media graduates to possess.

Additionally, the internship director's focused attention on a single cohort of Creative Media students can maximize students' learning experiences with current businesses. The following are deliverables collaboratively produced by Creative Media students: Regal Kapolei Commons Movie Theatres movie trailers, broadcast television commercials for UH West O'ahu, mobile apps for businesses and organizations in the community, informational videos for Title IX and Violence Against Women Act programming, commercial film work (e.g., Disney's *Moana*),

and digital shorts on current community topics (e.g., conservation for the Historic Hawai'i Foundation). These opportunities created new relationships and opportunities and led to jobs and careers for our graduates.

To date, the two Creative Media concentrations have graduated 38 students. Of the 28 we have been able to track, 15 are employed in the profession, 4 are in a graduate program in the disciplinary area, and 9 are employed in other professions (see Appendix D). Recent graduates have found employment at:

- KHON
- Hawai'i 5-0
- Magnum P.I.
- Civil Beat
- BMW Honolulu
- VA Honolulu
- Leilehua High School
- Windward Community College

# 2. To Align Creative Media With UHWO's Transdisciplinary Pivot

The BACM curriculum organizes teaching and learning around an explicit set of core proficiences that blend multiple fields (e.g., humanities, business, social sciences) with digital technologies. To ensure quality learning outcomes, UHWO is committed to using a degree-level assessment and evaluation system known as the Degree Qualifications Profile (DQP, Lumina Foundation, 2014, www.DegreeProfile.org).

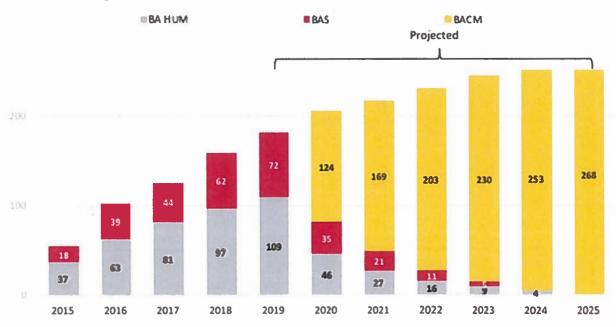
In short, the DQP is a structured process that guides our faculty to collect information/data so that they can better understand what the students in a degree program should know and what they should be able to do. Our assessment of the BACM affirmed that scholarly levels were met in the following areas: analytic inquiry, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency, communicative fluency, and program-specific intellectual and practical skills. (Please see section below on BACM program and Appendix B, Degree Qualifications Profile Overview for further details of this evaluation process.)

#### 3. To Prioritize Access To Post-Secondary Education

DBEDT has identified the "Creative Sector" as one of a handful of emerging industries in the state, now comprising "about 6.3% of all civilian jobs in Hawai'i" (DBEDT, "Hawai'i's Targeted and Emerging Industries – 2018 Update Report). The proposed BACM degree will produce graduates prepared to enter this growing industry with a more technical and transdisciplinary skillset that will position them for success in the economy of the 21<sup>st</sup> century. The Creative Media concentrations at UH West O'ahu, which currently exist under two separate degrees, have experienced steady enrollment growth since their inception in 2014, demonstrating student demand for this academic path and career field. A stand-alone degree will be more visible, provide easier navigation of degree requirements, and support persistance to graduation.

Image 1. Headcount Enrollment in Creative Media Programs, below, lists current enrollments since 2015 with projections through 2025.

**Image 1. Headcount Enrollment in Creative Media Programs** 



Data are for Fall semesters.

Source: UH System IRAO DAPIR, Projections from UHWO IRO

Table 2. Headcount Enrollment in Creative Media Programs

Projected 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 **BA HUM** First-Time Transfer-In (UHCC) Continuing BAS First-Time Transfer-In (UHCC) Continuing **BACM** First-Time Transfer-In (UHCC) Continuing (UHWO Change of Majors) Continuing Total

Source: UH West Oahu Institutional Research Office.

Data are for fall semesters

As Image 2. Creative Media Degrees Awarded, illustrates, graduation rates have been steadily climbing and are projected to grow through 2025 figures.

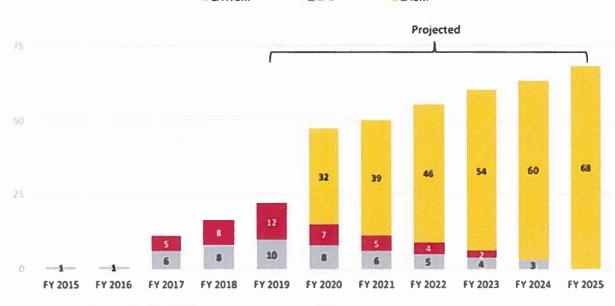


Image 2. Creative Media Degrees Awarded

Source: UH System IRAO DAPIR, Projections from UHWO IRO

Nevertheless, without an independent degree in Creative Media, UH West O'ahu students are forced to choose between majoring in Applied Science or the Humanities. In either case, the degree structure forces current students to take courses to meet requirements that are superfluous to the discipline of Creative Media.

A stand-alone BA would remove these obstacles, thus allowing Creative Media students to progress more quickly and purposefully towards graduation.

The campus continues to improve and strengthen the recruitment work for the proposed BA in Creative Media degree through community college transfer articulations (see below), Early College partnerships with regional high schools – Wai'anae High School (Searider Productions), Campbell High School, Kapolei High School and Waipahu High School – and as a signature program within the overall campus enrollment management strategy.

<u>Community College Transfers.</u> The proposed BA in Creative Media aligns and coordinates with the UH Community College campuses with its 2+2 and other collaborative and unique pathways that build on its liberal arts foundation, giving students throughout Hawai'i access to a four-year degree program in creative media studies; hence, proposing an efficient use of resources by the System-wide Academy for Creative Media (See UH-S ACM Strategic Plan). UHWO Creative Media currently has 22 articulation agreements with UH community college campuses. The following programs are part of the articulation agreements:

Leeward Community College: TV Production & Digital Media

Honolulu Community College: Music & Entertainment Learning Experiences &

**Communication Arts** 

Kapi'olani Community College: New Media Arts

Windward Community College: Pending Creative Media certificate

Kaua'i Community College: Creative Media Hawai'i Community College: Creative Media UH Maui College: Creative Media (Also, 2+2 with Tokai International College)

Table 3. UH Community College Transfers into UHWO BA in HUM with a concentration in CM or BAS in APSC with a concentration in CM, illustrates steady growth of the campus' current Creative Media concentrations over the past four academic years for which data is available, rising from 11 new students to 37 new students over a three-year period.

Table 3. UH Community College Transfer into BA-HUM-CM and BAS-APSC-CM							
	AY14/15	AY15/16	AY16/17	AY17/18			
Leeward CC	8	8	13	26			
Honolulu CC	0	4	3	2			
Kapi'olani CC	2	0	3	4			
Windward CC	1	0	0	3			
Hawai'i CC	0	0	0	0			
UH Maui College	0	1	1	1			
Kaua'i CC	0	1	0	1			
Total	11	14	20	37			

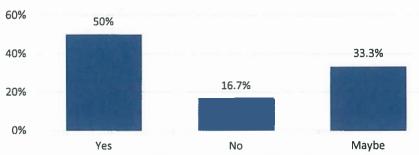
Early College Programs. Another pathway into the two concentrations is through Early College, which fosters collaboration with our regional high schools and provides both general education and content-specific learning experiences that prepare students for college, including the two concentrations curriculum. (See Appendix C, Early College Report for a recent Early College program assessment.) By following the program's model, students who are part of this vertically aligned pathway will have an opportunity to fulfill their high school graduation requirements while simultaneously earning college credits from UH West O'ahu.

<u>Student Demand.</u> The campus initiated the current Creative Media concentrations under the Bachelor of Arts in Humanities and the Bachelor of Applied Science in 2014. Over the past 4.5 years the program has gained momentum while addressing the constantly evolving digital and media fields that are fast becoming an economic driver in the region and beyond.

Creative media at West O'ahu, even within its curricular limits, has, over a short time, evolved into a signature area of concentration that currently graduates media specialists who are in demand in nearly every area of business, education, government, communications, and so on. The move from concentrations to a stand-alone BA in Creative Media illustrates the emergence of a new degree program distinct from the concentration level where it was initially developed.

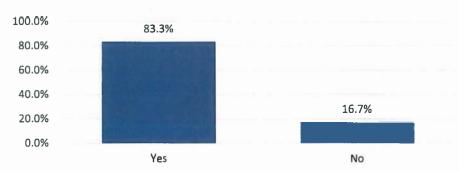
A recent survey in 2017 of our current students and recent graduates illustrates that the skills learned have had significant impact on their careers (Image 3) and that many students would even consider returning to UHWO to earn a BA in Creative Media once it is established (Image 4). (See Appendix D, Student and Alumni Survey.)

Image 3. Would you consider coming back to get a Creative Media degree?



Source: Current Creative Media Major Preference Survey 2017

Image 4. Do you currently use the skills you learned while at ACM to achieve your professional goals?



Source: Current Creative Media Major Preference Survey 2017

#### DEGREE PROPOSAL: BACHELOR OF ARTS IN CREATIVE MEDIA

"We are looking for a person to add to the marketing team. The position is a bit different as it involves proposal writing/assistance as well as creativity in producing videos and marketing collateral. The ACM program is a good place to look for talent."

(Oceanit, August, 2017)

UH West O'ahu's proposed Bachelor of Arts in Creative Media program is an innovative transdisciplinary program that interlaces the domains of art and design, narrative, information science and technologies with extended study and field practice to strengthen students' integrative literacies necessary for a broad range of careers in government and non-government organizations, educational institutions, technological firms, and private firms.

This stand-alone degree will increase the employability of our students by signaling to employers Creative Media graduates' extensive expertise in that specific field (rather than in general Applied Science or the Humanities). Furthermore, the revised program requirements for this degree meet UHWO's strategic outcomes that seek to prepare students to be leaders and innovators in current and new arenas.

A stand-alone BA in Creative Media, by virtue of being able to exert control over its own curriculum, will be able to be more responsive to the latest developments in the creative industries sector. This is in contrast to the current situation where Creative Media has to share control with, and be bound to the curriculum of, other divergent concentrations in the existing Applied Science and Humanities programs.

The curriculum that underpins this proposed BA in Creative Media is specifically designed for Creative Media students and thus spares them from superfluous course requirements and streamlines their path towards graduation. The BACM degree program also provides greater integration with existing UHCC Associate of Science degrees, thereby simplifying transfer student pathways.

Like all Bachelor of Arts degrees, the BACM will primarily (a) build on a core set of ideas (assumptions, foundations or canons), (b) explore and instruct in order to expand both conceptual as well as technical/pragmatic knowledge and skills, and (c) provide learners opportunities to build critical thinking, leadership, civic engagement, and problem solving competence.

The proposed Creative Media program at UH West O'ahu recognizes the continuously evolving technology that drives content creation and emerging global dissemination platforms and distribution systems. While honoring the legacy film school curricula based in the analog era of the last century, UH West O'ahu's Creative Media program embraces digital media literacy experienced through transmedia production (e.g., YouTube), animation, video games, social media platforms, apps, virtual and augmented reality, and computational media (the nexus of visual storytelling and coding).

This program of study is especially appropriate for students who have a passion and talent for creating or producing works of art through a fluency and comfort with new technologies. Unlike the BA in Creative Media in place at UH Mānoa, which is firmly grounded in critical studies and film production, UH West Oʻahu's proposed BACM will have a skills-based and production-oriented focus, targeting students who wish to pursue careers in the design of graphic art, mobile apps, or video games/game design and development. Course requirements will address the maintenance of and ongoing support and development for existing artistic skills; promote and foster support for a broader understanding of related disciplines including arts, humanities, and technology; and provide extended in-depth, experiential learning by working in multidisciplinary teams on creative media projects or problems.

# Establishing the Academy for Creative Media - West O'ahu

The Office of the Vice Chancellor for Academic Affairs (VCAA) reviewed its organizational structures as part of the UHWO Strategic Action Plan, 2018-2028, process. In light of UH West O'ahu Creative Media's role within the UH System ACM plan (as a hub for system-wide enterprises in this field), we have established a stand-alone unit for our campus: The Academy for Creative Media – West O'ahu. While the academic program comes under the purview of UHWO faculty and staff, its endeavors enjoy the productivity and partnership that come with our close relationship with UH System ACM ventures.

The ACM West O'ahu director, who reports directly to the VCAA, leads the program's faculty and staff. Faculty reviews, including contract renewals, tenure, and promotion, will be conducted under the procedures for faculty responsible to the VCAA who are not otherwise assigned full-time to a specific academic division.

#### A Robust Academic Program: B.A. in Creative Media

UHWO is proposing one degree, a BA in Creative Media. The establishment of this degree program will allow UH West O'ahu students to major in one Creative Media degree program and direct a greater share of their time and energy to the courses, concepts, and skills that engage them in more relevant endeavors. (A more detailed overview of these skillsets can be viewed in Appendix H, Spider Graphs.)

The campus will begin to phase out the Creative Media concentrations within the BA in Humanities and the BAS in Creative Media. Over the course of the next three years, Creative Media students already in the Humanities BA or BAS programs can select the BA in Creative Media or complete their Humanities or BAS concentration in Creative Media. Students who are a part of the UH System ACM multi-campus articulated pathway will be primed for smooth transitions into the new degree program. Graduates of creative/digital media or communications programs beyond the UH System will also be eligible and will be advised on appropriate transfer pathways based on evaluations of their course history and portfolios.

Image 5, below, maps a student's transition from the BAS degree to a BA in CM. There may be instances where two or three classes may be needed, but we forecast minimal impact to students completing their degree on time. For a more complete explanation see Appendix E, Academic Transition Pathway.

HAVE YOU COMPLETED THE COURSE WORK FOR THE BAIN CM? CHECK WITH AN **BAIN HUM WITH** BANCM WITH YES ACADEMIC ADVISOR. CONCENTRATION CONCENTRATION IN CREATIVE MEDIA IN CREATIVE MEDIA PATHWAY NO 3 ADDITIONAL COURSES\* **COMPLETED? YES** - (1) LD CM FOUNDATION (2) CM CONCENTRATION HAVE YOU COMPLETED THE COURSE WORK FOR THE BAIN CM? CHECK WITH AN ACADEMIC ADVISOR. BAS INAPSC WITH BANCM WITH YES **CONCENTRATION CONCENTRATION** IN CREATIVE MEDIA IN CREATIVE MEDIA PA THWAY NO 3 ADDITIONAL COURSES\* **COMPLETED? YES** (2) CM CORE (1) CM CONCENTRATION

Image 5. Advising Pathway to BA Creative Media

# Organization

Students in the proposed BA in Creative Media would complete 120 credits in the following general areas (See <u>Appendix F, Academic Map for B.A. in Creative Media and Appendix G, Advising Sheet</u> for a view of how a student might advance through the program):

- General Education and Graduation requirements (43 credits)
- Foundational Core Creative Media coursework (100 200 level) (or have completed an AS degree in a media design program)
- Creative Media Program Core Requirements (18 credits)
- Creative Media Concentration Areas (21 credits)
- Electives (18 21 credits)

#### Outcomes

Degree Learning Outcomes (DLO) for the BA in Creative Media, in light of five essential learning areas, will enable students to, at minimum:

DLO 1: Synthesize multiple creative media forms (e.g., game design, internet platforms, mobile apps, sound design, motion graphics, graphic design, storytelling) including at least two or more tools and technology in an appropriate body of work that focuses on the creative media of tomorrow.

DLO 2: Use research and information-gathering skills to identify, analyze, and propose solutions.

DLO 3: Make sound ethical and legal decisions in creating and using creative media.

DLO 4: Evaluate and critique work in chosen field including self-work by using professional terminology and criteria.

DLO 5: Communicate ideas to peers, clients, and intended audiences using visual, oral, and written presentation skills relevant to their chosen media field.

DLO 6: Produce a body of work suitable for seeking professional opportunities in their chosen media field.

DLO 7: Work productively as members of creative media teams.

The Program Plan for the BA in CM was assessed using the above DLOs. All but one of the courses required for the degree is already being offered at UHWO as part of the two current CM concentrations. The sole course under development is listed in italic:

# **Creative Media Program Core Requirements (18 credits)**

- CM 256: Creatives in Media (New Course Being Developed)
- ART 311D: Research in Design or CM 402 Archival Research for Media Makers

- CM 314: Music, Sound & Media
- CM 320: Creative Producing
- CM 401: Creative Professionals
- HIST 363: 20th Century Pop Culture

# **Program Requirements (42 credits)**

- CM Foundational Core coursework (18 credits)
  - ART 101 Introduction to Visual Arts
  - ART 107D Intro to Digital Photography
  - ART 112 Intro to Digital Art
  - ART 113D Intro to Digital Drawing
  - ART 126 3D Computer Graphics I
  - ART 221 Design for Print and Web
  - ART 229 Interface Design I
  - ART 231 Art Through Applied Geometry
  - ART 240 Typography and Color in Design
  - CM 120 Introduction to Digital Video

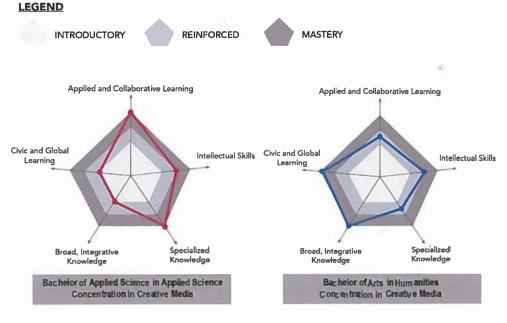
- CM 140 History of Video Games
- CM 142 Introduction to Video Game Design
- CM 143 Introduction to Game Art
- CM 150 Film Analysis and Storytelling
- CM 151 Pre-Production: Digital Video
- CM 152 Principles of Video Editing
- CM 153 Sound Design for Digital Media
- CM 155 Intro to Screenwriting
- CM 160 The Mobile Word
- CM 161 Introduction to iOS Mobile App Development
- CM 251 Animation and Special Effects
- ICS 101 Intro to Digital Tools for the Information World
- ICS 111 Introduction to Computer Science
- CM Concentration Areas (21 credits) from the following list (Students choose one area of interest: Game Design, Interface Design, Transmedia or General Creative Media.) See Appendix G, pg. 22 for full list
  - Design & New Media (21 credits)
  - Communications & New Media Technologies (21 credits)
  - Video Game Design & Development (21 credits)
  - General Creative Media (21 credits)
- Senior Capstone (3 credits)

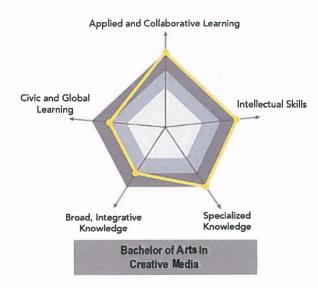
# Comparing the Current Concentrations to the Proposed Degree Program

At UHWO, it is essential that all Bachelor of Arts degree programs, current and proposed, meet our standards of quality, rigor, and relevant learning. The distinctiveness of the BA in Creative Media is illuminated through five learning proficiencies. To provide a high-level understanding of the differences between the proposed BACM degree and the current concentrations in Applied Science and Humanities, we have included spider graphs in Image 6, which visually capture the differences in curriculum focus among the five learning areas. (For further detail please refer to Appendix B, Degree Qualifications Profile (DQP) Overview.)

Note the difference between the web shapes at the top, which represent the profiles of the two current Creative Media concentrations that currently reside in the Bachelor of Applied Science and Bachelor of Arts in Humanities degree programs. The shapes visually represent the combination of proficiencies from each of the five areas of learning that collectively define the requirements for their respective degrees. In contrast, the two shapes are skewed in opposite directions. Then, compare the top two shapes with the lower web in Image 6. The lower shape representing the proposed Bachelor of Arts in Creative Media is noticeably more symmetrical, corresponding to a more complete, comprehensive degree program, in terms of what its graduates should know and be able to do.

Image 6. Comparative Analysis of BA in Humanities, BAS, and B.A. in Creative Media





Observed above, the BACM's course of study has a wholistc focus on student learning with delineation of increasing levels of challenge. Curriculum development follows the five essential learning areas:

- Specialized Knowledge: Identifies specialized conceptual knowledge/theories and practical skills that student will demonstrate proficiency.
- <u>Broad and Integrative Knowledge</u>: At all levels of the students' learning they are asked to explore global concepts and questions that bridge multiple knowledge bases (e.g., science, humanities, social sciences, cultural studies, etc.). Students are then better prepared for civic participation and community leadership.
- <u>Intellectual Skills</u>: The coursework (e.g., communications, ethical reasoning, information technology) and field experiences/internships engage students throughout their course of study to make and translate/interpret ideas from a variety of points-of-view.

- Applied and Collaborative Learning: The creative products and scholarship that students generate, individually or in a team, will demonstrate their fluency in both the critical understandings of the field as well as expert applications.
- <u>Civic and Global Learning</u>: As a key outcome of the UHWO's Theory of Distinctiveness, graduates of this baccalaureate degree will be able to respond to political, economic, health and environmental challenges (and so on) critical to the local community and global arena.

Additionally, the proposed BACM degree differs from the two current Creative Media concentrations in its ability to reach across disciplines and combine technical knowledge with global awareness, providing students with the best of both worlds. The BAS, as one would expect and as illustrated in Image 6, pulls more toward specialized technical knowledge and applied learning while lacking somewhat in global learning and integrative knowledge. The current BA in Humanities, on the other hand, offers students a strong civic and global learning foundation and mastery of the disciplinary canons of the liberal arts yet does not provide Creative Media students with sufficient amounts of applied learning experiences and technical expertise (i.e. specialized knowledge).

The proposed BA in Creative Media will synthesize the stronger aspects of the two existing concentrations, providing students with a more thoroughly integrative learning experience that, among other things, offers a strong civic/global base with an applied and collaborative focus. Graduates of UH West Oʻahu's new BA in Creative Media will possess the technical skills to excite employers and possess the global and cultural awareness and integrative framework to enable them to anticipate and adapt to the ever-unfolding transformations of the 21<sup>st</sup> century economy and its accompanying career fields.

# ACM UHWO Strengthens Creative Media Programs across UH-System

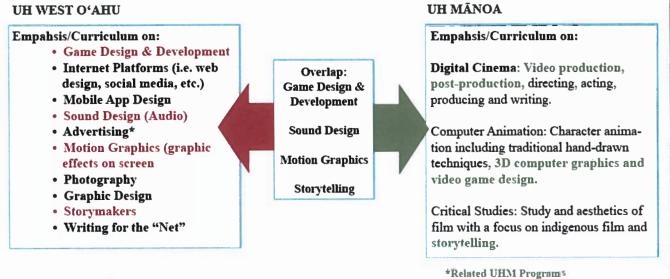
From its inception, UH West O'ahu's Creative Media concentrations have consistently prioritized transfer pathways, partnering with the UH Community Colleges to develop 22 different articulation agreements across all 7 UHCC campuses that have established UHWO's program as a destination of choice for the System's AS and AA students alike. While this collaboration has benefitted all parties involved, the existing pathways contain inefficiencies that inevitably delay students' timely progression towards degree attainment.

To date, students have been forced to choose between Creative Media concentrations housed under an Applied Science degree or a Humanities degree. In either case, students are required to complete a host of major requirements that are largely tangential to the discipline and career fields that excite them. The creation of a stand-alone degree in Creative Media, however, will streamline the core requirements for UHCC transfer students, making the goal of a 2+2 degree pathway that much more achievable. The degree has been designed to facilitate the creation of articulation agreements that provide more efficient transfer pathways while also aligning more closely with industry needs.

UHWO's proposed BA in Creative Media differs fundamentally from the current program at UH Mānoa and is designed to appeal to a different pool of students. There are foundational learning elements that all Creative Media programs must provide to learners before branching into specialized knowledge areas. Hence, there may appear to be some overlap of learning experiences; however, having curricular platforms that are unique to each campus mission can strengthen the overall capacity for the UH System to provide a wide range of learning opportunities for all students.

A substantive review of both UHWO's proposed degree program and UHM's BA in Creative Media was performed by the offices of the Vice Chancellors for Academic Affairs at the two campuses. Image 7, Strengths and Similarities of UHWO and UHM Programs, below, shows the unique learning experiences of both programs, with overlap in four areas.

Image 7. Strengths and Similarities of UHWO and UHM Programs (Used with permission from W. Pearson, UHM, OVCAA)



BA in Communications and BA in Journalism offer curricula and courses in Adverting, Social Media Platforms, Writing for the 'Net.

BA/BFA in Art has concentrations in Graphic Design and Photography.

As illustrated in the graphic above, the proposed West O'ahu degree program complements the UH Mānoa program. While Mānoa's degree provides its students with the rich critical studies and cinematic foci that one would expect of a full-fledged research institution, the UH West O'ahu BACM degree will appeal to students interested in acquiring the hands-on technical expertise needed to succeed in areas such as mobile app design immediately upon graduation. While a student seeking to pursue a career as a screenwriter might be better served in UHM's program, someone interested in the field of motion graphics might select UHWO. Essentially, the proposed program strengthens the vision and commitments of the UH System Creative Media platform by complementing UH Mānoa's degree and offering UHCC students a second and rather different Creative Media learning experience and career path. Chris Lee, Director ACM-System and Dr. Doris Ching, Chief Academic Officer ACM-System stated:

The UHWO Center for the Academy for Creative Media is uniquely positioned to strengthen the ACM System Vision because it is the only program with articulation agreements to all seven community colleges, thus allowing UHWO ACM to fulfill the mandate of the BOR for a system-wide program. It is the only program at UH that is available for students on every island. ACM-UHWO further enhances the Vision of ACMS by housing the ACMS-developed 'Ulu'ulu, the State of Hawai'i's Official Moving

Image Archive and unique educational resource for UHWO students and faculty on campus, and throughout the islands online. The ACM-UHWO program's robust public and private support has already resulted in the ground breaking for UH's first purposebuilt Student Production Center which will be available to students from throughout the UH System. It is the \$37M investment in ACMS and the state's future that would only have been made at UHWO and needs to be supported by a UHWO BA in Creative Media. UHWO further offers the opportunity to build the state's proposed public/private Motion Picture, Television and Digital Content Studio Complex, making ACMS one of the only Creative Media programs in the world to offer direct access to an actual studio. The attributes that only UHWO ACM can offer are the nexus of ACMS's promise to be the true catalyst for the diversification of the State of Hawai'i's economy. (January 15, 2019)

# Effectiveness Program Evaluation

The proposed BA in Creative Media will adhere to the campus program review process every 7 years, the Annual Report of Program Data, and appropriate WSCUC accreditation processes. The program review process requires programs to report progress on student achievement data, perform an analysis of course and program student learning outcomes assessment, review current curriculum and recommend changes, and determine future need for additional resources. Program effectiveness will be determined by looking at student achievement data which includes the number of declared majors, annual degree attainment, and the number of students who graduate within 5 years. In tandem with this traditional approach, and aligned to the Degree Qualifications Profile standards, the program assessment will also include project-based learning indicators that identify specialized knowledge, broad/integrated knowledge, intellectual skills, applied/collaborative learning, and civic/global learning proficiencies to gauge student growth and learning.

Metrics for the BA in CM will rely heavily on authentic assessment. Authentic assessment is a process where the student's knowledge/skill is evaluated by his/her ability to perform a "real world" task in the same way or setting as a CM professional, in line with the IAFP call to "emphasize practical applications." For example, the learning outcome "Apply advanced creative and aesthetic skills with a variety of creative media packages and equipment" could be evaluated as if the student artifact in question was actually produced at the Hawai'i Film Office.

To address neighbor island articulations, UH West O'ahu has taken measures to improve and build its online offerings by requiring our faculty to undergo Quality Matters (QM) training. Recently, 10 Art and Creative Media faculty received their online digital credentialing from QM. QM is a faculty-centered, peer-review process that is designed to certify the quality of online and blended courses. QM is a leader in quality assurance for online education and has received national recognition for its peer-based approach and continuous improvement in online education and student learning. In addition, the program is planning annual advisory committee meetings with industry partners, community college partners and the ACM system to gauge the effectiveness of the program and its ability to meet the workforce needs of the community and state.

# Resources & <u>Cost Analysis</u>

There has been a good amount of investment in Creative Media at UHWO. In 2013, the Hawai'i State Legislature, in an effort to support the expansion of the System-wide ACM programs, passed SB 3168 that positioned UH West O'ahu's Creative Media unit "as a cornerstone of the State's development of the Kapolei-West O'ahu region as a hub of Hawai'i's creative media industry." Similarly, HB 1309 recognized the "unique opportunities for digital media industry development in Hawai'i resulting from the groundbreaking of the long-awaited University of Hawai'i - West O'ahu campus in Kapolei . . ."

In June 2013, the Governor approved the state budget that appropriated \$2.1 million for the ACM UH System that included both funding for operational costs and 10 positions. UH West O'ahu's Creative Media concentrations were allocated 4 of those positions and approximately \$500,000, which included funding for payroll and operating costs. The proposed program will become the recipient of the continued funding for ACM West O'ahu.

In 2016, the State Legislature approved \$37 million for the design and construction of a Creative Media building at UH West O'ahu. In 2015, the Roy and Hilda Takeyama Family Foundation made a \$1 million commitment to support and advance the mission and priorities of ACM West O'ahu. In Spring 2018, the design/build contract for the new 33,000 square-foot facility was awarded with completion in late summer, 2020. The new building is designed to accommodate up to 500 majors and will feature state-of-the-art hardware and software, the UH System's first proper screening room, a soundstage, editing and sound mixing areas, an emerging media lab, and an incubator for student and graduate companies. UH News: ACM Building UHWO Campus

#### Current Faculty, Staff, and Budget

Currently, ACM West O'ahu houses 4.0 FTE: two instructional faculty, one specialist faculty (director), and a lab supervisor. There are several student assistants and a temporary lab assistant. To cover the range of program specialties, ACM-UH West O'ahu regularly employs 14-16 lecturers to teach 43 classes (equivalent to 5.375 FTE) per academic year. The program received funding of \$612,720 for FY2019 from UH-System ACM for both payroll and operational costs. Current personnel coupled with its temporary laboratory/classroom space, is stretched to meet CM's growth on campus, via Early College, and online. Insert the following: UH-System ACM will continue to fund the payroll and operational costs of ACM West O'ahu and its currently proposed program.

## Supporting the growth of UHWO BA in Creative Media

In 2020, ACM West O'ahu will move into its new facility. In preparation, faculty and staff are strengthening the Early College pipeline, reinforcing community college transfer strategies, and engaging in a broader strategic marketing plan with the assistance of enrollment management and communications. Table 4. Cost Projection and Table 5. Revenue Projection provide projected additional annual costs and total revenues by fiscal year associated with anticipated student growth (majors).

**Table 4. Cost Projections** 

Program Costs	Current 18-19	Year 1 19-20	Year 2 20-21	Year 3 21-22	Year 4 22-23
Faculty FTE	3.0	4.0	6.0	8.0	8.0
Lecturer FTE	5.375	6.0	7.0	7.0	7.0
Staff FTE	1.0	1.0	2.5	6.5	6.5
FTE Total	9.375	11.0	15.5	21.5	21.5
Instructional Materials and Supplies	\$25,000	\$54,500	\$59,405	\$64,751	\$70,579
Utilities, Water, Sewage			\$200,000	\$214,000	\$228,980
Other Expenses Total	\$25,000	\$54,500	\$259,405	\$278,751	\$299,599

The projected increase in anticipated student enrollment as noted in Table 5, below, requires an increase in faculty and staff to meet academic and student-focused program needs:

#### • FY 20-21

- 1.0 FTE Specialist Faculty (S-3). To increase laboratory use and both online and Early College delivery. Faculty without fringe cost.
- 1.0 FTE Specialist Student Academic Advising Faculty (S-3). With increased student enrollment a dedicated academic adviser will ensure student success. Faculty without fringe cost.
- o 1.0 FTE Designated for Professional Practitioner Lecturer Pool. Will enable the program to provide and increase offering of specialty areas by industry professionals. Personnel with fringe cost.

#### FY 21-22

- o 1.0 FTE Administrative Assistant (APT, Band B). To provide program, fiscal, personnel, and building facility support. Staff without fringe cost.
- o 1.0 IT Specialist (APT, Band B) computer/AV support. To manage equipment/facility usage. Staff without fringe cost.
- 1.0 FTE Designated for Professional Practitioner Lecturer Pool. Will enable the program to provide and increase offering of specialty areas by industry professionals. Personnel with fringe cost.

In addition to programmatic needs, and because a facility-related budget was not included in the initial construction costs, we anticipate the need for the following essential personnel and costs:

#### • FY 20-21

- o 1.5 FTE Janitorial Services. In light of the square footage and the highly specialized equipment. Staff without fringe cost.
- o Approximately \$200,000 in utilities (electricity, water/sewer, etc.) per year.

#### • FY 21-22

2.0 FTE Security. The Creative Media building's proximity to the rail stop and the value of equipment housed in the building require a higher level of security. This is for security during campus hours only, not 24/7. Staff without fringe cost.

The cost of maintaining equipment has not been determined, however, we are consulting with specialists in the industry.

The BACM projected annual program revenue for FY 19-20 through FY 22-23, as noted in <u>Table 5</u>, below, was derived based on a projection of student enrollment, the number of anticipated Fall and Spring semester 3-credit courses (assuming a headcount of 20/course) and a rising annual tuition rate of 1.0%, in line with the rate of increase in the BOR-approved tuition schedule that runs through AY19-20.

Projected Current Year 1 Year 2 Year 3 Year 4 **Program Revenues** 18-19 19-20 20-21 21-22 22-23 Headcount enrollment -N/A 46 N/A 27 16 **BACM** Headcount enrollment -97 109 35 21 11 HUM/CM Headcount enrollment -62 72 124 169 203 BAS/CM Headcount CM enrollment 159 181 205 217 230 - TOTAL Number of courses 75 61 68 85 95 Number of credits 183 204 225 255 285 3660 4080 Student semester hours 4500 5100 5700 Tuition rate/credit \$303 \$306 \$309 \$312 \$315 Projected tuition revenue \$1,108,980 \$1,248,480 \$1,390,500 \$1,591,200 \$1,795,500

**Table 5. Revenue Projection** 

The projected additional costs are also depicted in Table 6 below as a plan for allocation requests. The additional costs would be permanently added to the UHWO ACM allocation in the designated fiscal year; hence, we show when the allocation would be added.

**Table 6. Plan for Allocation Requests** 

	Fiscal Year					
<b>Added Cost Projection</b>	20 - 21	21 - 22	22 - 23	23 - 24	24-25	25-26
Faculty w/o Fringe	\$151,850					
Staff w/o Fringe		\$120,000				
Instructional Materials and Supplies	\$25,000					
Professional Lecturer Pool w/Fringe Cost	\$46,152	\$47,537	\$48,963	\$50,432	\$25,972	\$26,751
Janitorial Services	\$64,872					
Security		\$86,016				
Utilities, Water, Sewage	\$200,000					
Total Costs	\$462,874	\$253,553	\$48,963	\$50,432	\$25,972	\$26,751

## Risk Assessment

The Office of the Vice Chancellor for Academic Affairs and the the Office of the Vice Chancellor of Administration have determined that there are no additional risks identified over and above those associated with our current courses.

## University of Hawai'i – West O'ahu Degree Proposal for a Bachelor of Arts in Creative Media

## **Appendices - Table of Contents**

Appendix A, page 2	Occupational Outlook
Appendix B, page 4	Degree Qualifications Profile (DQP) Overview
Appendix C, page 6	Early College Report
Appendix D, page 12	Student and Alumni Survey
Appendix E, page 17	Academic Transition Pathway
Appendix F, page 21	Academic Map for B.A. in Creative Media
Appendix G, page 22	Advising Sheet
Appendix H, page 26	Spider Graphs

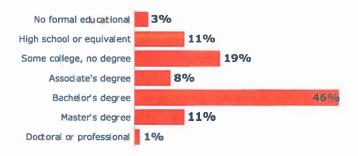
## Appendix A, page 2: Occupational Outlook

#### **MULTIMEDIA ARTIST AND ANIMATORS**

## Job Market Trends



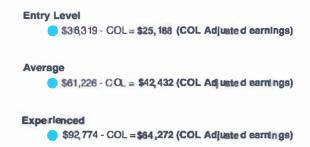
## **Educational Attainment**



Educational attainment data for each occupation represent the highest level of education achieved by workers who are employed in this occupation (National).

### **Average Salary**

### Earnings with "cost of living" adjustment



## Other Data:



## Appendix B, page 4: Degree Qualifications Profile (DQP) Overview

The Degree Qualifications Profile (DQP) outlines a set of reference points for what students should know and be able to do upon completion of associate, bachelor's and master's degrees – in any field of study.

There are five broad categories of proficiencies which provide a profile of what degrees mean in terms of specific learning outcomes. Through focusing on broad areas of learning and the application of that learning, the DQP illustrates progressively challenging performance expectations for all students.

Implementation Resources: http://degreeprofile.org/roadmap/roadmap-cover/

- Tuning Impact Study: Developing faculty consensus to strengthen student learning
- Roadmap to Enhanced Student Learning: Implementing the DQP and Tuning
- Tuning: A Guide for Creating Discipline-Specific Frameworks to Foster Meaningful Change
- Degree Qualifications Profile Impact Study: Framing and Connecting Initiatives to Strengthen Student Learning
- Using the Degree Qualifications Profile: To Foster Meaningful Change
- General Education and/or Program Development and Review
- Revision and Alignment of Learning Outcomes
- Alignment with External Expectations
- Improving Student Transfer

#### DOP SPIDER WEB

It can be helpful to visualize the DQP in terms of a spider web: a structured, interconnected series of levels that simultaneously build on and support one another. The web is strung among five anchor lines, each representing one of the basic proficiencies. The shape of the spider web – its boundaries, slope, and distances between learning points – is determined as the institution adopts and articulates its version of the DQP, Once the points are fixed, a "core" of learning appears – the combination of proficiencies from each of the five areas of learning that collectively define the requirements for a specific degree. These cores of learning expand progressively outward as students extend their knowledge (Lumina Foundation, 2015).

### DQP GRID

The DQP Grid lays out all of the learning outcomes for a given degree, grouping them within the five categories of learning. Additionally, by using a degree's curriculum map (the *what* and *why* for curricula and sequence of courses), the DQP Grid visually portrays the demarcation of increasing levels of challenge, enabling a continuing and sustainable emphasis on learning as the proper determinant for the quality and value of degrees (Lumina Foundation, 2015).

The DQP provides resources for strengthening accreditation, including consensus on specific, concrete learning outcomes. The 2013 WSCUC Handbook of Accreditation includes a brief discussion of the DQP as a framework to convey the meaning of degrees, one of the required Components of the Institutional Report for reaffirmation.

## DQP/TUNING COACHES

To advance and accelerate campus initiatives to enhance student learning, the National Institute for Learning Outcomes Assessment (NILOA) and Lumina Foundation are working together to offer a practical, useful resource to improve student learning. Lumina's mission singularly focuses on improving college completion rates.

NILOA is working with a group of DQP/Tuning Coaches who are available to help colleges and universities with their improvement efforts. DQP/Tuning Coaches are available for a one-day campus visit at *no cost* to the host institution. Leeward CC and UH West Oʻahu are proud to host Natasha Jankowski, Director of NILOA, as a DQP Coach January 10 and 11<sup>th</sup>. Jankowski co-authored Degrees That Matter: Moving Higher Education to a Learning Systems Paradigm.

## Appendix C, page 6: Early College Report





## Early College High School Program Report

Fall 2017



#### Introduction

This Early College High School (ECHS) Pathway is a collaborative effort between the Academy for Creative Media at University of Hawai'i, West O'ahu (ACM UHWO), Wai'anae High School's Searider Productions (WHS SP), and Waipahu High School's Early College High School Program (WaipHS ECHS). The program has been designed to foster college and career readiness, as well as afford students educational opportunities that will not only make them viable in a competitive job market, but also cultivate in them the skills necessary to succeed as individuals.

## Academy for Creative Media at the University of Hawai'i, West O'ahu

The ACM UHWO integrates various media domains, such as design, storytelling, and technology, providing students with a rich educational foundation to grow as a future professional. Course requirements address development and maintenance of existing artistic skills; foster support for a broader understanding of related disciplines (such as humanities and technology); and provide experience in working on realistic problems. Since 2012, the ACM UHWO Program has expanded to include the Roy & Hilda Takeyama Creative Media Lab, the 'Ulu 'Ulu moving image media archive, and the Cyber-Collaborative Analytics Navigation and Observation Environment. The ACM UHWO program is also host to Master Classes, an educational series of speakers drawn from the artists and professionals of the creative media industry.

## Wai'anae High School Searider Productions

For over 20 years, the WHS SP has garnered national recognition. In 2016, WHS SP students were the recipient of 4 High School Emmys awarded by the National Academy of Television, Arts, and Sciences. The program has strong partnerships with colleges, universities, and business organizations which allow their students experiential opportunities within the creative media industry. The mission of the WHS SP is to provide students with the skills, attitude and knowledge needed for success in both local and global communities. The vision of the WHS SP is to create an integrated program where media present and future creatively converge in celebration of Hawai`i's stories, multiethnic culture and community.

### Waipahu High School Early College High School Program

Since 2012, the Waipahu High School Early College High School Program has exponentially grown, serving well over 300 students per academic year, and becoming the model program in the state. In 2018, the program will graduate its first cohort of academic *Olympians*, students who have not only completed their high school requirements, but have also earned enough college credits to obtain their Associates degree as well.

### Rationale

The Wai`anae district is home to some of the most indigent communities in Hawai`i. It also has a high concentration of Native Hawaiian, Asian Pacific Islanders and Filipino Americans; ethnic groups who are grossly underrepresented in higher education. Over 80% of adults in the Wai`anae district do not hold a bachelor degree, and nearly one out of five individuals are below the national poverty level. Students enrolled in Wai`anae High School reflect their surrounding communities. The Waipahu district, while exhibiting slightly higher social economic status indicators, have similar features to that of Wai`anae. Table 1 summarizes the demographic information for both Wai`anae and Waipahu district, as well as Wai`anae and Waipahu High School.

Table 1. Demographic Information for Wai'anae High School and Surrounding Community.

	Wai anae High School	Waipahu High School
Community Population	13,177	38,216
Largest Ethnic Group (Community) <sup>a</sup>	41.6% Native Hawaiian	67.1% Asian
Bachelor Degree or Higher	7.9%	15.8%
Persons Below Poverty Level <sup>a</sup>	23.4%	13.2%
High School Enrollment	1,789	1,281
Largest Bthnic Group (High School)	60.4% Native Hawaiian	64.2% Filipino
Qualify for Free or Reduced Lunch	100%	61.9%
College Going Rate <sup>d</sup>	43%	56%

<sup>&</sup>lt;sup>a</sup> U.S. Census Bureau (2015): State and County Quick Facts: http://quickfacts.census.gov/qfd/states/15000.html.

http://www.hawaiipublicschools.org/VisionForSuccess/AdvancingEducation/StriveHIPerformanceSystem/Pages/home.aspx.

UHWO ACM ECHS Pathway has been designed to reduce this disparity in education, and decrease the level of poverty in both the Wai'anae and Waipahu districts. By following the UHWO Early College High School Program's model, students who are part of the WHS SP and WaipHS ECHS will have an opportunity to fulfill their high school graduation requirements while simultaneously earning college credits from the UHWO.mmSuccessful completion of the program will not only guarantee admission into the ACM UHWO, but also ensure that participating students will have already completed more than the first year requirements for a Bachelor of Arts in Humanities, with a focus in Creative Media.

A bachelor's degree in Creative Media opens many opportunities for positions in graphic and web design, digital video production, and other digital media outlets. On average, starting salaries range from \$35,000 – 55,000 depending on creative industry and size of firm. In Hawai'i the creative sector supports a wide spectrum of commercial businesses, individuals, cultural enterprises and non-profit institutions. Creative enterprises produce, directly or indirectly, a range of goods services that are the product of artistry, design, aesthetic value or

<sup>&</sup>lt;sup>b</sup> Hawai'i Department of Education Accountability Resource Center Hawai'i (2014-2015): http://arch.k12.hi.us/.

<sup>&</sup>lt;sup>c</sup> Hawai'i Department of Education STRIVE Data (2014-2015):

<sup>\*</sup> Combination of Intermediate and High School.

cultural enterprise. As a whole, employment in this sector grew nearly 10 percent from 2002 to 2008, compared to 14 percent nationally. The average earnings in the sector in 2007 were nearly \$50,000. In 2012, the thirteen creative industry groups accounted for an estimated 47,700 jobs in the State, nearly 6% of all civilian jobs. Performing/Creative Arts were the largest group in the sector, accounting for almost 20% of jobs in the sector.

### **Program Objectives**

- Pool resources from the Academy of Creative Media at University of Hawai`i, West
   O`ahu, Wai`anae High School's Searider Productions, and Waipahu High School's Early
   College High School Program to afford students with even greater educational
   opportunities in the field of Creative Media.
- 2. Delineate a clear educational pathway between the three programs, and provide students a bridge as they transition from a secondary to a post-secondary educational institution.
- 3. Offer classes from the UHWO Creative Media Program to high school students in the Wai'anae High School Searider Productions Program and Waipahu High School Early College High School Program that will fulfill their high school graduation requirements while simultaneously earning them college credits
- 4. Allow students an opportunity to complete the first year requirements for a Bachelor of Arts in Humanities, with a focus in Creative Media at the UHWO.
- 5. Increase college and career readiness in participating students, cultivating in them the skills necessary to not only succeed in the field of creative media, but also in becoming global citizens who go on to contribute back to their communities.
- 6. Create highly qualified and well trained professionals who will remain viable in a constantly changing job market.

<sup>&</sup>lt;sup>1</sup>Information taken from the UHWO ACM Website: http://acmsystem.hawaii.edu.

## **Proposed Core Curriculum**

Table 2. Sample of the Program Curriculum.

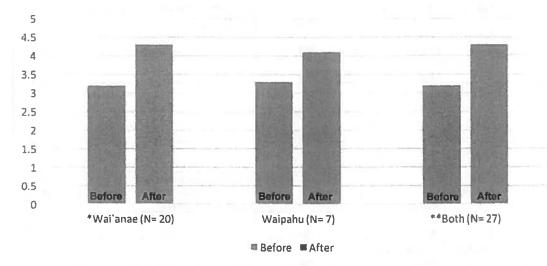
	Summer/Fe	all Semester	Spring	Semester
	UHWO Course	DOE Equivalent	UHWO Course	DOE Equivalent
Pre-Pathway	SD 100: The University Experience (1 credit)	N/A		
Year 1	ART 112: Intro to Digital Art (3 credits)	Graphic Design Technology 1 (1 DOE Credit); ACCN: TAU2124	ART 107D: Intro to Digital Photography (3 credits)	Photography 1 (1 DOE Credit); ACCN FVP1000
Year 2	CM 120: Intro to Digital Video (3 credits)	Video Production for Television 1 (0.5 DOE Credit); ACCN: XMT1020	CM 142: Intro to Video Game Design (3 credits)	Gaming (1 DOE Credit); ACCN: TAN2311
		& Video Production for Television 2 (0.5 DOE Credit); ACCN: XMT1025	ART 126: Intro to 3D Graphics (3 credits)	Animation (1 DOE Credit); ACCN: TAN2210

Total UHWO Credits Farned (Contingent on Successful Completion of Course Sequence): 13
Total DOE Credits Farned (Contingent on Successful Completion of Classes); 4

## Outcome Measures (Fall 2017):

- Overall student success rate of 100% (scoring "C" or better in classes).
- Students accumulated anywhere from 3 to 6 college credits in ACM.
- 60% of Wai`anae cohort identify as Native Hawaiian; 96% of Waipahu cohort identify as Filipino.
- 55% of Wai'anae cohort female; 96% of Waipahu cohort female.
- Confidence about succeeding in college (after taking EC classes):

# Confidence About Succeeding in College (Before and After EC Classes)



\*t(20)= -5.39, p < .001; \*\*t(27)= -5.29, p < .001.

## Appendix D, page 12: Student and Alumni Survey

## **SURVEY: CURRENT CREATIVE MEDIA STUDENTS**

Does ACM specialize in your area of interest? ( Game Design, Transmedia/Video Production, Web Design, Mobile App/Mobile game Design, Film, Graphic Design, Social Media, etc.)	Does the name of your Degree matter to you? Which would you prefer:	Would having a Bachelor of Arts in Creative Media make a difference in your career goals?	Write your thoughts on having a stand alone Creative Media Degree below:
Yes	Bachelor of Arts in Creative Media	Yes	I am a proponent of having a stand-alone Creative Media Bachelors and Masters degree. Currently if I wanted to pursue a Masters degree in graphic design or digital photography, I would have to leave Hawai'i.
Yes	Bachelor of Arts in Creative Media	Yes	I feel like a stand alone degree would have more options. I'm not sure the current BAS degree "specializes" in my interests but it offers some related classes.
Yes	Bachelor of Arts in Creative Media	Yes	Since I'm a transfer student, I want Creative Media to be Bachelor of Art in Creative Media so that I can transfer more of my credits and focus on CM.
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	It would create a better transition for students like myself who have continued their education from a community college.
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Humanities - Creative	Yes	
Yes	Bachelor of Science in Humanities - Creative Media focus	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	We want the stand alone degree please!
Yes	Bachelor of Arts in Humanities - Creative Media focus	Yes	Having a stand-alone Creative Media degree will result in less confusion. Majoring/getting a degree in CM as opposed to a degree to a degree in Humanities. It appears more practical.
No	Bachelor of Arts in Creative Media	No	I wish there was a class that specialized in your area of interest in depth. Instead or only 2 or 3 courses on it.
Yes	Bachelor of Arts in Humanities - Creative Media focus	Yes	I guess it would allow me more opportunities for classes from more specialized fields to flourish and be considered.

Yes	Bachelor of Arts in Creative Media	No	Having a stand-alone creative media degree would only work if there is practical experience taught for whichever area of interest.
Yes	Bachelor of Arts in Creative Media	Yes	As a transfer student, it'll change the amount of transferable credits. Also, it'll help students more on CM classes.
	Bachelor of Arts in Creative		I think a stand alone degree would help me be more specific in terms of what type of degree I
Yes	Media	Yes	want.
Yes	Bachelor of Arts in Humanities - Creative Media focus	Yes	I don't know but to me, it signifies my commitment to what I want to do.
Yes	Bachelor of Arts in Creative Media	No	I think it allows students to have a greater focus in their area of interest as opposed to taking classes from a wide range of subjects.
Yes	Bachelor of Arts in Creative Media	Yes	
	Bachelor of Science in Humanities - Creative		
Yes	Media focus	Yes	Its tough without staff there to help you.
Yes	Bachelor of Arts in Creative Media	Yes	It would make the degree more precise, with all area of interest, the program's description or what it's about is kinda blurry. Even the classes are different from area of interest. It's too broad, should be narrowed down.
163	Wicdia	103	
Yes	Bachelor of Arts in Creative Media	Yes	I think that by having a stand-alone Creative Media degree it would help with our degree's credibility.
Yes	Bachelor of Arts in Creative	Yes	
	Bachelor of Arts in Creative		Having a stand alone Creative Media Degree will allow students within the program to take more creative media courses because they will not be required to take the required courses under the Bachelor or Arts and Bachelor of Applied Science programs. This will result in a more effective program because their courses will be more applicable to their concentration. Currently there is one Creative Media degree mainly for developing a skillset, and another for developing concepts, ideas, or stories. With my experience, at the end of the day students will end up having to learn subjects from both degrees to be successful and well rounded. With a stand alone degree, it will be clear that students will learn all areas of creative media. I also believe that this will make students who graduate with this stand alone degree will stand out more than with a degree in Arts or Applied Science with a
Yes	Media Bachelor of Arts in Creative	Yes	concentration in Creative Media.
Yes	Media  Bachelor of Arts in Creative	Yes	
Yes	Media	No No	
Yes	Bachelor of Arts in Humanities - Creative Media focus	Yes	
Yes	Bachelor of Arts in Humanities - Creative Media focus	No	

Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Creative Media	Yes	
Yes	Bachelor of Arts in Humanities - Creative Media focus	No	
Yes	Bachelor of Arts in Creative Media	Yes	

## SURVEY: CREATIVE MEDIA GRADUATES

Do you wish you had a Creative Media degree rather than a Humanities?	Do you currently use the skills you learned while at ACM to achieve your professional goals?	Would you consider coming back to get a Creative Media degree?
Yes	Yes	Maybe
Yes	Yes	No
Yes	Yes	Maybe
Yes	No	Yes
No	No	No
Yes	Yes	Maybe
Yes	Yes	Yes
Yes	Yes	Maybe
Yes	Yes	Yes
No	Yes	Yes
Yes	Yes	Yes
Yes	Yes	Yes

# Appendix D Student and Employment Alumni Survey (Updated January 2019)

## **ACM UHWO Graduates**

Graudate	Year	Pathway	Status
Graduate A	2015	Leeward CC Digital Media	Pursuing Master's in Educational Technology;
Graduate A	2013	Eccward ce Digital Media	graphic designer with UHWO Student Life and
			Creative Media lecturer
Graduate B	2016	(Kapi'olani CC Interface	Graphic designer, Kapi'olani Community College
Graduate B	2010	Design)	Graphic designer, Rapi Gram community conege
Graduate C	2016	Leeward CC Digital Media	Graphic design assistant, Leilehua High School,
			owner of a graphic design/photography/print
			company
Graduate D	2016	Leeward CC Digital Media	Massage Therapist, Angel Care Massage;
	`	C	Freelance Web designer
Graduate E	2016	Leeward CC Digital Media	Pursuing Master's degree in Communication
Graduate F	2017	Leeward CC TV Production	Creative Director KHON
Graduate G	2017	Leeward CC TV Production	Military information specialist, Pearl Harbor;
			owner of a photography/videography company
Graduate H	2017	UHWO 4 year	Production Assistant on Magnum Pl
Graduate I	2017	UHWO 4 year	Digital Content Producer, Civil Beat
Graduate J	2017	Leeward CC Digital Media	Digital Media substitute teacher, DOE
Graduate K	2017	Santa Monica CC Transfer	HPD recruit
Graduate L	2017	Arizona CC Transfer	Production Assistant on Hawaii 5-0
Graduate M	2017	Honolulu CC	Marketing Assistant for Baird Brewing in Japan
Graduate N	2017	Kapi'olani CC	Freelance Animator, pursuing Master's degree in
			Art
Graduate O	2017	Leeward CC	State of Hawai'i Employee
Graduate P	2017	Honolulu CC	Manager, Gap
Graduate Q	2018	Honolulu CC	Admin. Assist. and music teacher, Keiki o ka 'Aina
Graduate R	2018	Leeward CC Digital Media	Graphic Designer at Aria
Graduate S	2018	Leeward CC Digital Media	Freelance Photographer, Camera consultant, Pro
			Camera Hawai'i
Graduate T	2018	Leeward CC Art	Marketing Assistant, BMW Honolulu, Freelance
			Illustrator – recently collaborated on a children's
			book
Graduate U	2018	Leeward CC Digital Media	Marketing Assistant, VA Honolulu
Graduate V	2018	UHWO 4 year	Program Assistant, UHWO
Graduate W	2018	UHWO 4 year	Videographer Student Life, UHWO, Camera
			Operator, Music & Mana'o Series
Graduate X	2018	U Penn transfer	Interface Designer, Anthology
Graduate Y	2018	Transfer from China	Pursuing Master's degree at Florida State
			University
Graduate Z	2018	Windward CC	Windward CC Media center
Graduate AB	2018	Leeward CC	Parent and Child Development Center, Freelance
			Illustrator
Graduate AC	2018	UHWO 4 year	Sales Assistant, VUE Hawaii

## Appendix E, page 17: Academic Transition Pathway

## Recommended Academic Transition Pathway from the BAS APSC to BA in CM:

## Based on Proposal for New BA in CM Academic Program

BA APSC conc		B.A. Requirement		substitution (S)	BA in CM UHWO Requirement
General Educa		Requirements (43 credits)		or equivalent	Requirement
3	ENG 100	Composition I		equivalent	FW
3	MATH 100	College Algebra	College Algebra		
3	FGA	Group A: Primarily before 1500CE		equivalent	Lower Div Math FGA
3	FGA	Group B: Primarily after 1500CE		equivalent	FGB
3	HWST 107/DH	Hawai'i: Center of the Pacific (DH, HAP) (Recommon Hawaiian Studies (Cultural Environment)	mended) to meet required 3 credits from	equivalent	DH, HAP
3	DA	ART 107D or ART 112 (recommended)		equivalent	DA, CM Foundation
3	DS	Social Science		equivalent	DS
3	DS	Social Science		equivalent	DS
3	DB/DP	Physical or Biological Science		equivalent	DB/DP
1	DY	Lab		equivalent	DY .
3	ENG 200, 209, 210, 215	Any from the list to the left.	The second secon	equivalent	ENG 200, 209, 210, 215
3	ICS 101 or PUBA 335	Intro to Digital Tools or Technology for Public Ad	ministration (This is course is required for the	Substitute ICS 100/ICS 101	CM Core
3	SSCI 301	Methods & Techniques in Social Science Research (This is course is required for the APSC core.)			CM Core
3	SSCI 210, PUBA 341, BUSA 320	Statistical Analysis I, Statistics for Decision Making in PUBA, Statistics for Decision Making (This credit is required for the APSC core.)			Elective
3	PUBA/BUSA /PHIL 481; PUBA 477; MGT 301; SCFS 485; Any UD ETH	Ethics and Administration; Ethics and Health Care Administration; Business Ethics; Cross-Cultural Environmental Ethics (This credit is required for the APSC core.)			CM Core
CM Core Regu		dits) – Program Core		Share The Start of the	
3	CM 256	Creatives in Media			CM Core
3	ART 311D	Design in Public Spaces	Francisco Company	equivalent	CM Core
3	CM 314	Music, Sound & Media		equivalent	CM Core
3	CM 320	Topics in Creative Producing		CM 320 alpha	CM Core
3	HIST 363	20 <sup>th</sup> Century Popular, Mass & Counter Culture			CM Core
3	CM 401	Creative Professionals (WI/ETH)		equivalent	CM Core
CM Foundation 18		(18 credits) he following: ART 112, ART 113D, ART 126, ART 2 50, CM 151, CM 152, CM 153, CM 155, CM 160, CI		Equivalent	CM Foundation
	ation Areas (21 cre				
Students cho	ose one area of in	terest: Design & Media; Video Game Design and	Development; Communications & New Media Tec	h; General CM	
18	CM	Design & New Media (21 credits)	Communications & New Media Technologies	Equivalent	CM
	Electives &	ART 320 Web Design & Development	(21 credits)	100	Concentration
	Film/Drama	CM 315 Interactive Applications	CM 201 Forensic Photography	I ALTERIA	
	Timi, Diama	CM 316 User Experience	CM 311 Audio Post Production I		
		CM 317 Motion Graphics	CM 317 Motion Graphics		
		CM 350 Creative Strategy  CM 351 Innovative Advertising  CM 352 Transmedia and Emerging Media	CM 321 Representations of Film/TV Product     CM 322 Documentary Film Research &     Development	tion	
		CM 358 Web Series Production CM 378 Visual Depictions of the Human Experience and Media Power CM 390 Creative Media Internship	CM 330 Audio Post Production II CM 351 Innovative Advertising CM 352 Transmedia and Emerging Media CM 353: Making a Short Film	186 m 11 10300 1	

	490A	redits) *Stats course will count here.	1 44		
3	APSC 486A/	Project/Practicum	Equ	uivalent	CM Capstor
CM Capsto	ne (3 Credits)			Market	Concentratio
		1 more from list above			СМ
		HPST 479: Hawaiian Mythology II			
		HPST 478: Hawaiian Mythology I			
		Mythology			
		HPST 477: Polynesian and Micronesian			
		HIST 326 Japan Cool: Anime, Manga, and Film			
		HIST 325 Asian Economies, Business & Consumers			
		ICS 240 Operating Systems     HIST 225 Asian Economies, Business 8.			
		ICS 211 Introduction to Computer Science II			
		CM 403 Special Topics			
		App Design			
		CM 400 (alpha) Master Class: Stop(c) Mobile			
		CM 391 Game Design Project			
		CM 390 Creative Media Internship	TOTAL TO TOTAL STOCKS.		
		Campaign	(CM), with at least (5) 300-400 level courses from the various tracks.		
		CM 358 Web Series Production     CM 359 Branded Entertainment: Online Video	Students take 21 credits in Art (ART) or Creativ		
		CM 352 Transmedia and Emerging Media     CM 358 Web Series Production	General Creative Media:		
		CM 343 Game Level Design			
		CM 342 Applied Game Design	PHIL 439: Philosophy and Film		
		Games	HIST 326: Japan Cool: Anime, Manga & Film		
		CM 341 Writing and Storytelling for Video	HIST 496: Contemporary Oceanic Film		
		CM 340 The Modern Game Industry	& Film		
		Video Game Design & Development (21 credits)	ENG 441: Gender & Sexuality in Literature		
			ENG 385: Fairy Tales and Their Adaptations		
		HPST 462: Traditional Art of Hawaii	Auteurs		
		HPST 461: Traditional Art of Hawaii	b) The TV Medical Drama; and c) Television		
		HPST 304: Hawaiian-Pacific Traditions	and American Culture;		
		HIST 321: Japanese Culture	Fiction Film; e) The Road Movie  • ENG 368: Topics in Television Studies a) TV		
		HIST 243: Asia Cool: Modern Asia & Pop Culture     Civilizations of Asia)			
		HIST 311: Chinese Culture     HIST 243: Asia Cool: Modern Asia & Pop Culture	ENG 367: Film Genres and Directors (a) Film (b) The Western: c) Gangeter Film: d) Science		
		Small Business Management	ENG 361: History of Film     ENG 367: Film Control and Directors (a) Film (b)		
		MGT 320 Fundamentals of Entrepreneurship &	ENG 360: Literature & Film     FNG 361: Nichary of Film		
		MGT 301 Business Ethics	ENG 300c: Introduction to Cultural Theory     The 250 Management of Silvers		
		BUSA 305 Advertising & Promotion Mgmt	ENG 317 Pidgin Creative Writing Workshop		
		BUSA 304 Consumer Behavior	ENG 313 Intro to Creative Writing		
	1	BUSA 300 Principles of Marketing	CM 430 Mastering Social Media		
		ICS 240 Operating Systems	CM 403 Special Topics		
		ICS 211 Introduction to Computer Science II	Animation (b); Documentary Arts (c)		
		ICS 184 Network Fundamentals	Screenwriting (a); Stop-Motion		
		ICS 113 Database Fundamentals	CM 400 (alpha) Master Class: Advanced		
		CM 403 Special Topics	CM 390 Creative Media Internship		
		CM 400 (alpha) Master Class: (C) Mobile App     Design	CM 354: Short copy for Campaigns     CM 358 Web Series Production		

\*Dark boxes represents credits that would either need to be taken or provided substitutes with after meeting with an Academic Advisor.

## Recommended Academic Transition Pathway from the BA HUM to BA in CM:

Based on Proposal for New BA in CM Academic Program

BA HUM cond	HUM concentration in B.A. Requirement			UHWO substitution (S) or equivalent	BA in CM UHWO Requirement
General Educ	ation (31 credits)				
3	ENG 100	Composition I		ENG 100	FW
3	MATH 100	College Algebra		MATH 103	FS, Lower Div Math
3	HIST 151	Group A: Primarily before 1500CE (This course	e is required for the HUM core.)	FGA	FGA
3	HIST 152	Group B: Primarily after 1500CE (This course is	s required for the HUM core.)	FGB	FGB
3	HWST 107/DH/MC MD course	Hawai'i: Center of the Pacific (DH, HAP) (Reco Hawaiian Studies (Cultural Environment) (This	HWST 107	ОН, НАР	
3	MCMD course/DA	ART 107D: Intro to Digital Photography (DA) (in the HUM core.)	ART 107D	DA, CM Foundation	
3	DS	Social Science	DS	DS	
3	DS	Social Science		DS	DS
3	DB/DP	Physical or Biological Science		DB/DP	DB/DP
1	DY	Lab		DY	DY
3	ENG 200	Writing Skills (This course is required for the H	ENG 200	ENG 200, 209, 210, 215	
3	HUM 300	Humanities Seminar (This course is required for the HUM core.)		CM 256	CM Core
		dits) – Program Core		A REPORT OF THE PARTY OF THE PA	
3	CM 256	Creatives in Media		Substitute with HUM 300	CM Core
3	ART 311D	Design in Public Spaces		equivalent	CM Core
3	CM 314	Music, Sound & Media		equivalent	CM Core
3	CM 320	Topics in Creative Producing		CM 320 alpha	CM Core
3	HIST 363	20 <sup>th</sup> Century Popular, Mass & Counter Culture	Substitute with a HIST or ENG culture class not already counted	CM Core	
3	CM 401	Creative Professionals (WI/ETH)	1497.00	equivalent	CM Core
	onal Requirements	76 - 371 (1971)			
15	Choose from t	he following: ART 112, ART 113D, ART 126, AR 43, CM 150, CM 151, CM 152, CM 153, CM 155,		Equivalent	CM Foundation
	One more from			THE PROPERTY OF THE	CM Foundation
CM Concentr	ation Areas (21 cre	edits)			
Students cho	ose one area of in	terest: Design & Media; Video Game Design an	nd Development; Communications & New Me	edia Tech; General CM	
15	CM	Design & New Media (21 credits)	Communications & New Media	Equivalent	СМ
	Electives & Film/Drama	ART 320 Web Design & Development     CM 315 Interactive Applications     CM 316 User Experience     CM 317 Motion Graphics	CM 201 Forensic Photography     CM 311 Audio Post Production I     CM 317 Motion Graphics		Concentration
		CM 350 Creative Strategy CM 351 Innovative Advertising CM 352 Transmedia and Emerging Media CM 358 Web Series Production CM 378 Visual Depictions of the Human Experience and Media Power CM 390 Creative Media Internship CM 400 (alpha) Master Class: (C) Mobile App Design CM 403 Special Topics ICS 113 Database Fundamentals ICS 184 Network Fundamentals ICS 211 Introduction to Computer Science ICS 240 Operating Systems BUSA 300 Principles of Marketing	CM 321 Representations of Film/TV Productions CM 322 Documentary Film Research & Development CM 330 Audio Post Production II CM 351 Innovative Advertising CM 352 Transmedia and Emerging Media CM 353: Making a Short Film CM 354: Short copy for Campaigns* CM 358 Web Series Production CM 390 Creative Media Internship CM 400 (alpha) Master Class: Advanced Screenwriting (a); Stop-Motion Animation (b); Documentary Arts (c) CM 403 Special Topics		

General Ele	ctives (18 – 21 C	realts)			
3	CM 490/491			Equivalent	CM Capston
	e (3 Credits)			Particular 1	CMC
		2 more nom nat above		HE WILL AND	Concentration
		2 more from list above		DE RESIDENCE	CM
		HPST 479: Hawaiian Mythology II			
		Mythology  • HPST 478: Hawaiian Mythology I			1
		HPST 477: Polynesian and Micronesian     Mythology			
		Film			
		HIST 326 Japan Cool: Anime, Manga, &			
		Consumers			
		ICS 240 Operating Systems     HIST 325 Asian Economies, Business &			1
	1	ICS 211 Introduction to Computer Science     ICS 240 Operating Systems			
		CM 403 Special Topics  166 211 International Community Science			
		Mobile App Design	various tracks.		
	15	CM 400 (alpha) Master Class: (C)	(CM), with at least (5) 300-400 level courses		
		CM 391 Game Design Project	Students take 21 credits in Art (ART) or Crea		
		Campaign  CM 390 Creative Media Internship	General Creative Media:		
		CM 359 Branded Entertainment: Online Vi     Campaign	PHIL 439: Philosophy and Film		
		CM 358 Web Series Production	Film		
		CM 352 Transmedia and Emerging Media	HIST 326: Japan Cool: Anime, Manga &		1
		CM 343 Game Level Design	HIST 496: Contemporary Oceanic Film		
		CM 342 Applied Game Design	Literature & Film		
		CM 341 Writing and Storytelling for Video Games	Adaptations  • ENG 441: Gender & Sexuality in		
		CM 340 The Modern Game Industry     CM 341 Writing and Standalling for Video	ENG 385: Fairy Tales and Their  Adaptations		
	1	(21 credits)	Medical Drama; and c) Television Auteurs		
		Video Game Design & Development	a) TV and American Culture; b) The TV		
			ENG 368: Topics in Television Studies		
		HPST 462: Traditional Art of the Pacific	(e) The Road Movie		
		HPST 461: Traditional Art of Hawaii	(d) Science Fiction Film;		
		HPST 304: Hawaiian-Pacific Traditions	(a) Film Noir; b) The Western; c) Gangster		
		HIST 321: Japanese Culture	ENG 367: Film Genres and Directors		
		HIST 243: ASIA COOI: MODERN ASIA & POP Culture (HIST 241: Civilizations of Asia)	ENG 360: Literature & Film     ENG 361: History of Film		
		HIST 311: Chinese Culture     HIST 243: Asia Cool: Modern Asia & Pop	ENG 360: Literature & Film		
		Small Business Management	Theory		
		MGT 320 Fundtls of Entrepreneurship &	Workshop     ENG 300c: Introduction to Cultural		
		MGT 301 Business Ethics	ENG 317 Pidgin Creative Writing		
	1	BUSA 305 Advertising & Promotion Mgmt	<ul> <li>ENG 313 Intro to Creative Writing</li> </ul>		

\*Dark boxes represents credits that would either need to be taken or provided substitutes with after meeting with an Academic Advisor.

## Appendix F, page 21: Academic Map for B.A. in Creative Media

University of Hawai'i West O'ahu – GPS Academic Map Bachelor of Arts in in Creative Media

#### Year 1 SEMESTER 1

#### SEMESTER 2

Fall	THE RESERVE TO SERVE THE RESERVE THE RE		Spring	CONTRACTOR OF THE PARTY.	91 11
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
FW	ENG 100	3	Writing Skills	ENG 200	3
FS and LD Math Req.	MATH 100, 103, 135 or higher	3	FGA / FGB	THE RELIGIOUS AND ADDRESS OF THE PARTY OF TH	3
FGA / FGB		3	DH / DL CM Foundation*	DH or DL	3
DA / DH / DL & CM	Art 112	3	DS	ANTH, ECON, POLS, PSY or SOC	3
Foundation					
DS	ANTH, ECON, POLS, PSY or SOC	3	CM Foundation	Art 107D or Art 101 (suggested)	3
Credits		15	Credits	PER AND THE THE RESERVE	15
MILESTONE: Art 112D is	a pre-requisite for Art 311D & 320	71	MILESTONE: Complete ENG	200 before taking WI courses	

#### Year 2

#### **SEMESTER 3**

#### **SEMESTER 4**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
DB	BIOL or ZOOL	3	DP	CHEM, GEOL, MET, OCN	3
DY	BIOL or ZOOL lab	1	CM Foundation	CM Foundation list	3
CM Foundation	Art 107D or Art 101 (suggested)	3	CM Core	HIST 363	3
CM Core	CM 256*	3	OC + LD Elective	e.g., SP 151	3
CM Foundation	CM Foundation list	3	HAP & LD Elective	HWST 107	3
LD or UD Elective		3			
Credits		16	Credits		15
MILESTONE:	•		MILESTONE : Complete &	NG 200 before taking WI courses	

#### Year 3

### SEMESTER 5

#### **SEMESTER 6**

Fall		Spring			
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
CM Core	ART 311D* or CM 402* (suggested)	3	ETH + WI CM Core	CM 401 (suggested)	3
CM Core	CM 314	3	CM Core	CM 320*	3
CM Concentration 300+	CM Concentration List	3	CM Concentration 300+	CM Concentration List	3
LD Elective		3	CM Concentration 300+	CM Concentration List	3
WI UD Elective	Writing Intensive 300 +	3	LD or UD Elective		3
Credits		15	Credits		15
MILESTONE:			MILESTONE : Schedule appo	ointment with Academic Advisor fo	r Degree Audit

#### Year 4

#### SEMESTER 7

#### **SEMESTER 8**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
CM Concentration 300+	CM Concentration List	3	CM Concentration 300+	CM Concentration List	3
CM Concentration 300+	CM Concentration List	3	CM Concentration 300+	CM Concentration List	3
UD Concentration Elective		3	LD or UD Elective		3
LD or UD Elective		3	LD or UD Elective		3
LD or UD Elective		3	Capstone & WI	CM 490 or 491	3
Credits		15	Credits		15
MILESTONE: Complete all W	Is but capstone by next term.		MILESTONE : Apply for grad	duation by Add /Drop date	
Talk to Faculty Advisor regarding Senior Practicum or Project					
Schedule appointment with	Academic Advisor for Grad Check				

### **Graduation Requirements**

- ☐ 45 Upper Division Credits Minimum
- ☐ 120 Total Credits Minimum☐ 30 UHWO Credits Minimum☐
- ☐ 3 Upper Division Writing Intensive Courses
- ☐ Focus Requirements (OC, HAP, ETH)

- □ 2.0 OVERALL GPA
- 2.0 UHWO GPA
- ☐ 2 0 CONCENTRATION GPA

<sup>\*</sup>Modified/New courses

## Appendix G, page 22: Advising Sheet

## **Bachelor of Arts in Creative Media**

UH West O'ahu Student Advising Sheet for Academic Year 20XX-XX

The goal of academic advising is to further enhance the educational mission of the university, and create quality, accessible advising partnerships with all students in a positive environment that supports student success. This advising sheet is for tracking purposes toward degree completion and is subject to change. Students also may track their academic progress via STAR Degree Check through MyUH at <a href="mayuh.hawaii.edu">myuh.hawaii.edu</a>, Academic Advising appointments may be scheduled by calling <a href="mayuh.hawaii.edu">808-689-2689</a> or toll-free from neighbor islands at <a href="mayuh.hawaii.edu">1-866-299-8656</a>.

Graduation Requirements (see the 20XX-XX catalog for any additional graduation requirements):					
☐ 45 Upper Division Credits Minimum	☐ 3 Upper Division Writing Intensive Courses	OVERALL GPA			
□120 Total Credits Minimum	☐ Focus Requirements (OC, HAP, ETH)	□ 2.0 UHWO GPA			
☐ 30 UHWO Credits		□ 2.0 CONCENTRATION GPA			

Students who are a part of the UH System multi-campus ACM articulated pathway are eligible for this program. Graduates of other creative media or communications programs will also be considered for admission through a portfolio and transcript review.

Please contact Sharla Hanaoka, email shanaoka@hawaii.edu.

Note: Some courses may be applied more than once to fulfill General Education, Core, or Concentration Requirements. Double counted courses do not reduce the number of credits required for the concentration. Students are still responsible for meeting the minimum number of credits in the concentration and the overall total credits for graduation.

## **General Education Requirements: 31 credits**

Credits	Course Alpha / Number / Title	
3	Foundations Written Communication (FW) ENG 100 Composition	
3	Foundations Symbolic Reasoning (FS) MATH 100, 103, 103M/L, 115, 135 or higher (will satisfy lower division math requirement for Humanities)	
3	Foundations Global and Multicultural Perspectives (FG): 6 credits from two different groups (A,B or C) *Group A: Primarily before 1500 CE (e.g.; HIST 151 or ANTH 151) *Group B: Primarily after 1500 CE (e.g.; HIST 152 or ANTH 152) *Group C: Pre-history to present	
3	Foundations Global and Multicultural Perspectives (FG): Group different from above	
3	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas	
3	Diversification Arts, Humanities & Literature (DA, DH, DL): Different from area above	
3	Diversification Social Sciences (DS): 6 credits from two different areas	
Diversification Social Sciences (DS) Different area from above.		
3	Diversification Natural Sciences (DB, DP, DY) 3 credits from the biological sciences (DB)	
3	3 credits from the physical sciences (DP)	
1 1 credit of laboratory (DY)		

## Writing Skills Requirement: 3 credits

## Select one course from the following:

ENG 200 Composition II

ENG 209 Business Writing

**ENG 210 Writing Term Papers** 

ENG 215 Research/Argumentative Writing

	Credits	Course Alpha / Number / Title	
3 ENG 200, 209, 210, 215 or equivalent (check w/a student services academic advisor)		ENG 200, 209, 210, 215 or equivalent (check w/a student services academic advisor)	

## Lower Division Math Requirement: 3 credits

Credits	Course Alpha / Number / Title			
3 ENG 200, 209, 210, 215 or equivalent (check w/a student services academic advisor)				

## Creative Media Program Core Requirements: 18 credits

Course Alpha / Number / Title			
CM 256 Creatives in Media*			
ART 311D Research in Design (course name is being revised) or CM 402 Archival Research for Media Makers (course name is being revised)			
CM 314 Music, Sound & Media			
CM 320 Creative Producing (course name is being revised)			
WI CM 401 Creative Professionals (ETH)			
HIST 363: 20th Century Popular, Mass & Counter-Culture (DH)			

## **Program Requirements: 42 credits**

## **Creative Media Foundational Requirements**

## Students choose 18 credits from the list below:

otaaoiito	officer to official from the field below.		
ART 101	Introduction to Visual Arts (DA)	CM 143	Introduction to Game Art
ART 107D	Intro to Digital Photography (DA)	CM 150	Film Analysis and Storytelling (DA)
ART 112	Introduction to Digital Art (DA)	CM 151	Pre-Production: Digital Video
ART 113D	Introduction to Digital Drawing (DA)	CM 152	Principles of Video Editing
ART 126	3D Computer Graphics I	CM 153	Sound Design for Digital Media
ART 221	Design for Print and Web (DA)	CM 155	Introduction to Screenwriting
<b>ART 229</b>	Interface Design I (DA)	CM 160	The Mobile Word
ART 231	Art Through Applied Geometry	CM 161	Introduction to iOS Mobile App Development
ART 240	Typography and Color in Design	CM 251	Animation and Special Effects
CM 120	Introduction to Digital Video	ICS 101	Intro to Digital Tools for the Information World
CM 140	History of Video Games (DH)	ICS 111	Introduction to Computer Science I
CM 142	Introduction to Video Game Design		

Credits	Course Alpha / Number / Title
3	
3	V
3	
3	
3	
3	

## Creative Media Concentration Areas (21 credits) from the following list

Students choose one area of interest: Game Design, Interface Design, Transmedia or General Creative Media.

Design & Media (21 d	credits)
----------------------	----------

ART 320	Web Design & Development	CM 352	Transmedia and Emerging Media
CM 315	Interactive Applications	CM 358	Web Series Production
CM 316	User Experience	CM 378	Visual Depictions of the Human Experience and
CM 317	Motion Graphics		Media Power
CM 350	Creative Strategy	CM 390	Creative Media Internship
CM 351	Innovative Advertising	CM 400	(alpha) Master Class: (C) Mobile App Design

'reative Media 20XX - XX

BUSA 304	Special Topics Database Fundamentals Network Fundamentals Introduction to Computer Science II Operating Systems Principles of Marketing Consumer Behavior Advertising & Promotion Management Business Ethics Fundamentals of Entrepreneurship & Small Business Management	HPST 461	Chinese Culture Asia Cool: Modern Asia & Pop Culture (HIST 241: Civilizations of Asia) Japanese Culture 20th Century Popular, Mass & Counter-Culture Hawaiian-Pacific Traditions Traditional Art of Hawaii Traditional Art of the Pacific Leadership
Video Gan CM 315 CM 316 CM 340 CM 341 CM 342 CM 343 CM 352 CM 358 CM 359 CM 390 CM 391	Interactive Applications User Experience The Modern Game Industry Writing and Storytelling for Video Games Applied Game Design Game Level Design Transmedia and Emerging Media Web Series Production Branded Entertainment: Online Video Campaign Creative Media Internship Game Design Project		(alpha) Master Class: Stop(c) Mobile App Design Special Topics Introduction to Computer Science II Operating Systems Asian Economies, Business & Consumers Japan Cool: Anime, Manga, and Film Polynesian and Micronesian Mythology Hawaiian Mythology I Hawaiian Mythology II Leadership
Communic CM 201 CM 311 CM 317 CM 321 CM 322 CM 330 CM 351 CM 352 CM 353 CM 358 CM 358 CM 390 CM 400	Forensic Photography Audio Post Production I Motion Graphics Representations of Film/TV Productions (Renamed) Documentary Film Research & Development (Renamed) Audio Post Production II Innovative Advertising Transmedia and Emerging Media Making a Short Film Short copy for Campaigns* Web Series Production Creative Media Internship (alpha) Master Class: Advanced Screenwriting (a); Stop-Motion Animation (b); Documentary Arts (c) Moving Image Archives for Film Special Topics	CM 430 ENG 313 ENG 317 ENG 300c ENG 360 ENG 361 ENG 367 ENG 368 ENG 441 HIST 496 HIST 326 PHIL 439 SD 360	Mastering Social Media Intro to Creative Writing Pidgin Creative Writing Workshop Introduction to Cultural Theory Literature & Film History of Film Film Genres and Directors a) Film Noir; b) The Western; c) Gangster Film; d) Science Fiction Film; e) The Road Movie Topics in Television Studies a) TV and American Culture; b) The TV Medical Drama; and c) Television Auteurs Fairy Tales and Their Adaptations Gender & Sexuality in Literature & Film Contemporary Oceanic Film Japan Cool: Anime, Manga and Film Philosophy and Film Leadership

<u>General Creative Media:</u>
Students take 21 credits in Art (ART) or Creative Media (CM), with at least (5) 300-400 level courses from the various tracks.

\*New Course Being Developed

Credits	Course Alpha / Number / Title
3	
3	
3	
3	· × ×
3	
3	
3	

## Capstone: 3 credits

Credits	Course Alpha / Number / Title
3	WI CM 490 Creative Media Practicum OR WI CM 491 Senior Project

## **ELECTIVES 18 - 21 credits\***

## <u>Credits</u> Upper Division <u>credits</u> Lower Division

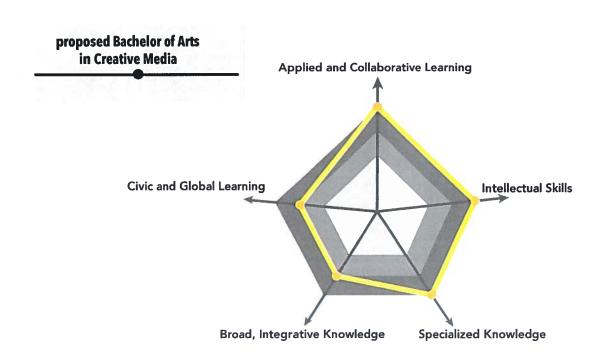
\*Please note Upper and Lower Division electives may vary depending on your course selection, please check with a Student Services Academic Advisor.

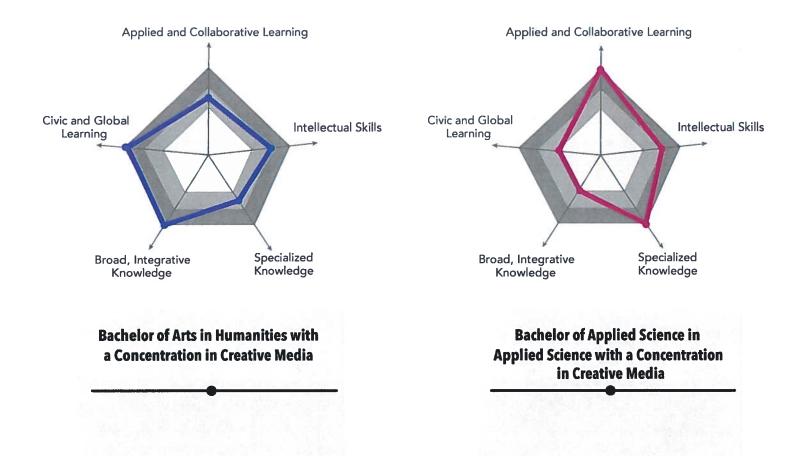
Credits	Course Alpha / Number / Title
3	Upper Division (300-400 level)
3	Upper Division (300-400 level)
3	
3	
3	
3	
3	
3	
3	
2	

## Appendix H, page 26: Spider Graphs

# LEGEND INTRODUCTORY REINFORCED MASTERY

## **CREATIVE MEDIA**





Office of the Chancellor



January 28, 2019

## RECEIVED

'19 FEB -7 P12:09

UNIVERSITY OF HAWAII

RESIDENT'S OFFICE

**MEMORANDUM** 

TO:

Lee Putnam

Chair, Board of Regents

VIA:

David Lassner

President

VIA:

Donald O. Straney

Vice President for Academic Planning and Policy

FROM:

Maenette Berham

Chancellor

SUBJECT:

Request Approval of a New Provisional Degree, Bachelor of Science in Natural

Sciences

### **SPECIFIC ACTION REQUESTED:**

It is requested that the Board of Regents approve a new provisional degree, the Bachelor of Science in Natural Sciences (BSNS), at the University of Hawai'i—West O'ahu.

### **RECOMMENDED EFFECTIVE DATE:**

Fall 2019

## **ADDITIONAL COST:**

The opening of a new Administration/Health Sciences Building and the 2018 legislative appropriation of 6.2 FTE positions in support of a Native Hawaiian Health Academy will enable

Lee Putnam, Chair, Board of Regents January 28, 2019 Page 2 of 5

the University of Hawai'i—West O'ahu to establish this degree program with limited additional funding. Anticipated tuition revenue generated through the enrollment of new majors will fund the initial required program expenses, including lecturer hires and the procurement of laboratory materials and additional library resources. Future program growth will be sustained through a combination of tuition revenue, the internal reallocation of existing funds, and the regular budget development and request processes.

### **PURPOSE:**

The proposed Bachelor of Science in Natural Sciences degree fulfills the charge of the UH System's Integrated Academic and Facilities Plan (IAFP) calling for the establishment of at least one STEM baccalaureate degree at the University of Hawai'i—West O'ahu, thus meeting a vital area of need in the campus' immediate region. With concentrations in Applied Mathematics, Life Sciences, and Health Sciences, the BSNS degree is designed to have a distinctively applied and technical focus that differentiates it from existing programs in place at the other four-year campuses. In accordance with the UH System IAFP, the BSNS is intended to align with current UH Community College technical programs through 2+2 and 3+1 articulation agreements while also serving as a destination point for emerging Early College career pathways focused on the health sciences.

#### **BACKGROUND:**

Board of Regents Policy 5.201: Instructional Programs states that "The board shall approve the establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president."

#### Significance/Contribution of this degree:

The proposed Bachelor of Science in Natural Sciences degree will focus on meeting the educational needs of Leeward O'ahu for careers in mathematical, life, and health sciences. The degree's core requirements offer students the rigor expected of a Bachelor of Science degree—with yearlong sequences in Calculus, Chemistry, Biology, and Physics—coupled with courses in Native Hawaiian healing and computer science, making the degree truly distinct. The proposed program is also consistent with the institution's Strategic Action Plan, 2018-2028, which explicitly articulates UH West O'ahu's commitment to supporting the greater community and fueling state economic growth by developing "innovative and transformative thinkers with the

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ability to generate and apply knowledge to address the pressing issues of our times" (page 7). The proposed degree also aligns with UH West O'ahu's designated applied and technical focus as defined by the UH System IAFP while honoring the Hawai'i State Legislature's directive to establish a Native Hawaiian Health Academy within the UH System.

### **Demand projections:**

The BSNS degree, with its inaugural concentrations of Applied Mathematics, Life Sciences, and Health Sciences, will provide foundational knowledge and equip students with the skills and abilities to pursue a number of career pathways, including those in industrial science and engineering, actuarial science, health services, and natural resource management. UH West O'ahu's proposed BSNS is perfectly situated to meet the serve the needs of the UH Community Colleges' 1,215 declared ASNS majors (as of Fall 2018)—the largest number of whom reside in the 'Ewa Beach and Kapolei zip codes—by providing an affordable four-year STEM degree right in their backyard.

A BSNS degree with an Applied Mathematics concentration will afford students a variety of job opportunities in occupations identified as having a "bright outlook." According to the latest Hawai'i Industry Sectors projections, STEM occupations such as actuaries, operations research analysts, and statisticians will entinue to increase both locally and nationally over the next decade. In these examples, the average salaries in Hawai'i are well above the \$33,342 considered to be the living wage in Hawai'i, according to the MIT Living Wage Calculator. Similarly, BSNS students choosing to concentrate in Life Sciences or Health Sciences will be poised to pursue careers in laboratory research, natural resource management, health and wellness, or health administration.

## Accreditation impact (if any):

The creation of this program should have a positive impact on UH West O'ahu's standing with its accrediting body, the WASC Senior College and University Commission. This action would bring the campus closer to fulfilling the academic vision that has long been expressed in past and current campus academic development plans as well as its Strategic Action Plan, 2018-2028. Indeed, it is exceedingly rare for a public university of UH West O'ahu's student body size not to offer a recognized STEM degree.

### Examples (2-3) of similar models from peer institutions:

UH West O'ahu's eight (8) designated peer institutions typically offer a wide range of BS degrees with narrower focus areas. For example, California State University – Monterey Bay

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offers separate BS degrees in: Biology; Environmental Science, Technology, & Policy; Marine Science; and Mathematics. Similarly, Eastern Oregon University offers separate BS degrees in: Biology; Chemistry-Biochemistry; and Mathematics.

UH Hilo is the only one of our currently identified peer institutions that has a similar degree, although it is offered only as a Bachelor of Arts degree. There are, however, a number of institutions across the country that offer a broad BS in a Natural Sciences degree similar to what UH West O'ahu is proposing. This comparison group includes:

California State University, Bakersfield California State University, Los Angeles Colorado State University Indiana University of Pennsylvania Temple University University of Alaska, Anchorage University of Puget Sound

#### Similar programs at other UH campuses:

The BA in Natural Science at UH Hilo is primarily intended for the preparation of science teachers. The College of Natural Sciences at UH Mānoa currently offers twenty (20) undergraduate degrees, each focused on a particular physical or biological science, while the proposed degree in Natural Sciences at West O'ahu is distinct in terms of its broad interdisciplinary focus.

Statement from campus administration of new program's strategic value within the UH System and campus mission, and the Integrated Academic and Facilities Plan:

This meets the UH System IAFP call for UH West O'ahu to focus on general degrees that are distinctive, and for degrees that will articulate well with our UH Community Colleges. In accordance with the IAFP, this degree is attentive to community college transfer students. In particular, it is designed to articulate with our UHCC Associate in Science in Natural Science (ASNS) programs, which focus on transfer to a four-year campus as their first and foremost goal.

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## Cost and resource allocation/reallocation implications:

Following the allocation of additional faculty positions from the Hawai'i State Legislature in 2018 in support of a Native Hawaiian Health Academy, the proposed BSNS degree will be supported by fifteen (15) permanent, full-time faculty lines, including three (3) tenured and eight (8) tenure-track faculty members as well as four (4) active searches with anticipated start dates of August 2019. There is also an APT position that serves as a full-time laboratory coordinator. With four (4) faculty positions in mathematics, six (6) in life sciences, and five (5) in health sciences, the campus has the personnel capacity to offer initial concentrations in Applied Mathematics, Life Sciences, and Health Sciences from the inception of the degree. Addressing these STEM needs also strengthens West O'ahu's capacity to meet the region's needs in related areas of health science and science education.

Impact of new program/program change request on campus budget allocations and mission priority

The costs to offer the proposed program are already covered by existing resources. In terms of faculty and personnel, UH West O'ahu possesses the capacity to deliver the program immediately.

#### **ACTION RECOMMENDED:**

It is recommended that the Board of Regents approve a new provisional degree, the Bachelor of Science in Natural Sciences, at the University of Hawai'i—West O'ahu.

Attachments:

New Program Proposal for the Bachelor of Science in Natural Sciences
Appendices

Kendra Oishi, Executive Administrator and Secretary to the Board of Regents

# **Proposal for a Degree Program**



## **Bachelor of Science in Natural Sciences**

February 2019

## Section I: Introduction – BSNS Program Purpose and Impact

This proposal is for the Bachelor of Science in Natural Sciences (BSNS) degree program at the University of Hawai'i-West O'ahu for students in Applied Mathematics, Life Science, and Health Science concentrations. The creation of this degree directly responds to the legislature's call to establish an undergraduate health sciences academic pathway at UH West O'ahu in collaboration with the John A. Burns School of Medicine (JABSOM) with a focus on Native Hawaiian student retention (see Appendix A). The BSNS will be the first STEM degree program offered at UH West O'ahu and will provide students with a robust foundation featuring a core requirement of year-long sequences in mathematics (Calculus), biology, chemistry, and physics. At the same time, the proposed BSNS degree promotes indigenous knowledge by including course offerings in Native Hawaiian healing in its core set of requirements. With the demand for STEM graduates strong and rising in the workforce, there is a substantial need at UH West O'ahu for the BSNS degree now and into the future. According to the University of Hawai'i Industry Sectors Database, occupations requiring a bachelor's degree with a Natural Sciences discipline are projected to increase from 2018 to 2027, with a mean salary of \$85,212 (Figure 1). At UH West O'ahu, we are now prepared to offer the BSNS degree with qualified faculty, developed curricula, and state-of-the-art equipment and science laboratories.

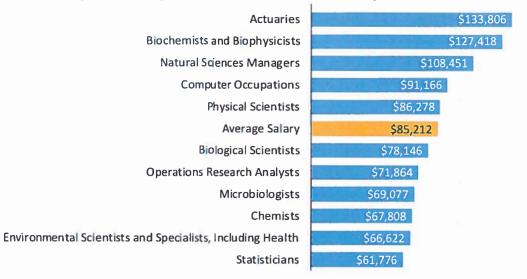


Figure 1. Average Salaries for Natural Sciences Occupations in Hawai'i

Source: UH West O'ahu Institutional Research Office, with data compiled from the University of Hawai'i Industry Sectors Database

<sup>&</sup>lt;sup>1</sup> Twenty-Ninth Legislature of the State of Hawaii, Senate Bill 2320, "Relating to an Undergraduate Health Sciences Academy," 2018.

### Section II: Student Demand

This BSNS proposal fulfills the charge of the UH Integrated Academic and Facilities Plan (IAFP) for UH West O'ahu to "focus on community college transfer students." The establishment of a BSNS degree at UH West O'ahu aligns with and reflects ongoing STEM program initiatives at the UH Community Colleges. The February 2018 proposal jointly submitted by five UHCC campuses to request conversion from provisional to established status for the Associate of Science in Natural Science (ASNS) degree explicitly stated that, "From its inception, the ASNS was designed to mirror the first two years of study towards the STEM Bachelor's degree. It has always focused on four-year transfer as its first and foremost goal." It is essential to point out that the ASNS was designed to provide the first two years of study towards the bachelor's degrees in STEM disciplines and has always focused on four-year transfer as its *primary* goal, highlighting the pressing need for a BSNS degree at UH West O'ahu. As of Fall 2018, there were 1,215 declared ASNS majors across the UH System (See Table 1).

Table 1. Declared ASNS Majors at UH Community Colleges

Natural Sciences (AS)	2016	2017	2018
Hawai'i CC	58	59	55
Honolulu CC	62	84	81
Kapi'olani CC	443	450	427
Kaua'i CC	19	32	42
Leeward CC	409	416	404
UH Maui College	53	55	46
Windward CC	168	169	160
Total	1,212	1,265	1,215

Source: UH West O'ahu Institutional Research Office

Through the creation of a BSNS degree, UH West O'ahu seeks to forge a viable academic pathway for many of these UH Community College students. It is worth noting that the 'Ewa Beach (96706) and Kapolei (96707) zip codes contain the largest portion of ASNS students in the UH System (See Figure 2, p. 3). This means that UH West O'ahu is situated in the ideal geographic location to serve the University's pool of ASNS students, allowing many of them to pursue a four-year STEM degree in their own backyard.

<sup>&</sup>lt;sup>2</sup> "Integrated Academic and Facilities Plan for the University of Hawai'i System," approved by the Board of Regents, April 20, 2017, http://www.hawaii.edu/offices/aa/IAFP\_BOR\_Approved\_April 17.pdf retrieved November 12, 2018.

<sup>&</sup>lt;sup>3</sup> "Proposal to Request Established Status for the Provisional Associate in Science in Natural Science (ASNS) Degree,"2018, <a href="https://www.hawaii.edu/offices/aa/aapp/ccao/FiveCampusASNSP2E">https://www.hawaii.edu/offices/aa/aapp/ccao/FiveCampusASNSP2E</a> Feb2018.pdf retrieved November 12, 2018.

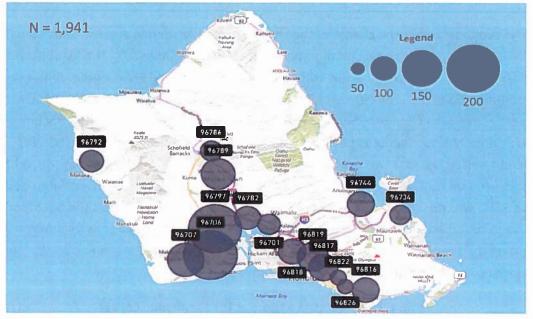


Figure 2. Headcount Enrollment of STEM Majors at UHCCs Residing on O'ahu, Fall 2018

Source: UH West O'ahu Institutional Research Office

As well as facilitating transfer from the UHCCs, UH West O'ahu's proposed BSNS program is designed to usher traditional first-year students in to a STEM bachelor's degree. This approach fulfills the IAFP's stated objective for the campus to aggressively seek "increased participation of baccalaureate bound high school students" from West O'ahu, relying in part on Early College career initiatives. Through its myriad Early College partnerships, the campus has been developing educational pathways that enable students to earn credits towards a specific UH West O'ahu degree while attending high school. UH West O'ahu has already created an Early College pathway in Health Sciences at Waipahu H.S. The launch of a B.S. in Natural Sciences will allow the campus to expand this P-20 approach by aligning the degree to existing career academies in place at surrounding high schools:

- Campbell: Academy of Health Services; Academy of Science, Technology, Engineering, Arts, and Mathematics
- Kapolei: Health Careers Academy
- Nānākuli: Health Services Pathway; Natural Resource Pathway (Plant Systems)
- Wai'anae: Health and Human Services; Natural Resources (Marine Science) Pathway
- Waipahu: Academy of Health and Sciences

UH West O'ahu's BSNS will be leveraged to drive UH System enrollment while providing the youth of West O'ahu with an opportunity to pursue a vibrant STEM-based academic and career path close to home, with the support of dedicated faculty and state-of-the-art facilities.

<sup>&</sup>lt;sup>4</sup> "Integrated Academic and Facilities Plan for the University of Hawai'i System," approved by the Board of Regents, April 20, 2017, <a href="http://www.hawaii.edu/offices/aa/IAFP">http://www.hawaii.edu/offices/aa/IAFP</a> BOR Approved April 17.pdf retrieved November 12, 2018.

The creation of the BSNS degree at UH West Oʻahu also supports Hawaiʻi's 21<sup>st</sup>-Century workforce needs. According to the State Department of Labor and Industrial Relations, occupations requiring mathematical and computer skills in Hawaiʻi are projected to increase to over 10,880 jobs by 2024, with one hundred (100) new jobs added annually. Additionally, occupations needing skills in life, physical, and social sciences are projected to rise to 8,310 jobs, with more than forty (40) new jobs added annually (see Table 2).

TABLE 2. Projected Job Openings in Hawai'i by Selected STEM Occupation

	2014	2024	Growth
Computer and Mathematical Occupations	9,880	10,880	10.1%
Life, Physical, & Social Science Technicians	7,890	8,310	5.3%
Operation Research Analysts	250	310	24.0%
Environmental Scientists and Specialists, Including Health	690	730	5.8%
Life Scientists	80	90	12.5%

Source: UH West O'ahu Institutional Research Office, with data compiled from HIWI https://www.hiwi.org/admin/gsipub/htmlarea/uploads/Long-TermProjections-2014-2024-State.pdf

At the national level, the US Bureau Labor Statistics 2017 Report listed Mathematical Sciences, as the fastest growing occupation over the time span 2009-2014 nationally, with projections to grow at an even faster rate through 2024. With the substantial demand at the state and national levels for STEM skilled labor coupled with the strength of UHCC's ASNS pathways, the need for a UH West O'ahu BSNS degree is evident. Beyond graduate school, BSNS graduates will be prepared for careers with federal agencies (EPA, NOAA, USFWS, Army Resource Management Program, etc.), state and county government (DLNR, DOH, DOT, DBEDT, etc.), educational and non-governmental organizations (Mālama Honua, The Hawai'i Nature Center, The Nature Conservancy, etc.), and local businesses and industries.

<sup>&</sup>lt;sup>5</sup> State of Hawaii Department of Labor and Industrial Relations, "Employment Projections for Industries and Occupations, 2014–2024," <a href="https://www.hiwi.org/admin/gsipub/htmlarea/uploads/Long-TermProjections-2014-2024-State.pdf">https://www.hiwi.org/admin/gsipub/htmlarea/uploads/Long-TermProjections-2014-2024-State.pdf</a> August 2016 retrieved November 12, 2018.

<sup>&</sup>lt;sup>6</sup> U.S. Bureau of Labor Statistics, "STEM Occupations: Past, Present, and Future," January 2017, https://www.bls.gov/spotlight/2017/science-technology-engineering-and-mathematics-stem-occupations-past-present-and-future/pdf/science-technology-engineering-and-mathematics-stem-occupations-past-present-and-future.pdf retrieved November 12, 2018.

In summary, the overarching goals of the proposed **Bachelor of Science in Natural Sciences** (BSNS) degree program are:

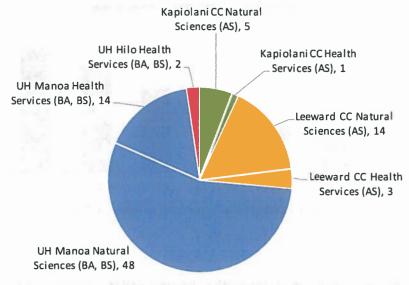
- To provide students with a four-year STEM degree program including robust year-long sequences (two courses each) in Calculus, Chemistry, Biology, and Physics, as well as a Native Hawaiian Health course.
- 2. To prepare students for a career requiring strong mathematical and scientific backgrounds.
- 3. To equip students with a sound foundation to succeed at a graduate level in fields related to mathematical, physical, life, and health sciences.
- To train students with the necessary skills for scientific analysis, research, communication, documentation, and exploration of trans-disciplinary fields, such as mathematics and science educators and medical lab managers.

#### **Section III: The Bachelor of Science in Natural Sciences Program**

The proposed Bachelor of Science in Natural Sciences degree strives to meet the educational needs for West O'ahu for careers in mathematical, physical, life, and health sciences. This program is consistent with UH West O'ahu's vision, mission and value proposition as the institution pivots toward a more transdisciplinary core of study and application that ensures outcomes in leadership, stewardship, and innovation. The proposed degree and its areas of concentration align with the UH System's Integrated Academic and Facilities Plan, the UH System's Strategic Directions, and UH West O'ahu's Strategic Action Plan, 2018-2028 as it moves the intellectual "core" mathematics, science, and health disciplines into cutting-edge conceptual and applied fields that traverse basic and applied sciences as well as the social and cultural sciences while linking with professional practice through internships, mentorships, and engaged scholarship.

The availability of a BSNS degree at UH West O'ahu will fill a conspicuous chasm in the campus curriculum that has been adversely affecting students. UH System records support anecdotal evidence that the absence of STEM programs at UH West O'ahu is prompting an outward migration of students. Over the past nine (9) semesters, eighty-seven (87) UH West O'ahu students have matriculated on another UH campus as a major in Natural Sciences or Health Services Programs, excluding Nursing and Pre-Nursing (See Figure 3). This means that the campus is losing a minimum of nineteen (19) prospective BSNS majors each academic year to transfer. While we can accurately track students who have remained in the UH System, it is reasonable to conclude that many more aspiring science students have left the University of Hawai'i entirely.

Figure 3. Transfers Out of UH West O'ahu to Other UH Natural Sciences/Health Services Programs (excludes Nursing and Pre-Nursing), Fall 2014 through Fall 2018 (n=87)



Source: UH West O'ahu Institutional Research Office

Therefore, establishing the BSNS degree program at UH West O'ahu supports our campus enrollment management plan as outlined in the UH System IAFP through the following avenues:

- 1. Providing continuing pathways for graduates of ASNS from UHCCs to UH West O'ahu.
- 2. Providing STEM career pathways for Early College participants enrolled in high school career academies, e.g., health sciences, life sciences, physical sciences, and so on.
- 3. Improving retention, persistence, and graduation rates of STEM students.

Articulation agreements with UH Community Colleges and the State Department of Education Early College Program, which connects regional high schools to UH West O'ahu, will enable enrollment in the program to grow quickly. Based on data presented in Section II on student demand, including the presence of 1,215 ASNS majors across the UH System, our Institutional Research Office projects the BSNS degree program to reach eighty (80) students by FY 2024-25.

**Table 3. Projected Headcount Enrollment for BSNS Majors** 

	Current	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
First-time	-	5	5	7	9	12	15
New transfer	-	7	8	10	14	21	25
Continuing	-	8	16	22	30	35	40
TOTAL		20	29	39	53	68	80

Source: UH West O'ahu Institutional Research Office

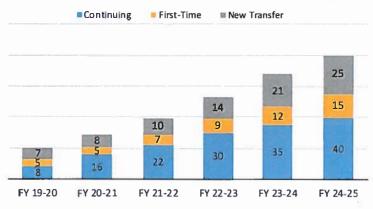


Figure 4. Projected Headcount Enrollment for BSNS Majors

Source: UH West O'ahu Institutional Research Office

#### Establishment of the Division of Mathematics, Natural and Health Sciences

As a part of the process of developing UH West O'ahu's Strategic Action Plan, 2018-2018, a review of the Office of the Vice Chancellor for Academic Affairs was undertaken. In light of the importance of STEM degree programs, the campus drafted a reorganization plan that established a sixth academic division at UH West O'ahu, the Division of Mathematics, Natural and Health Sciences. The personnel needs for this academic unit were satisfied by the transfer of eight (8) existing Mathematics and Science faculty positions and one (1) APT lab coordinator from the Humanities Division and three (3) Health Science faculty positions from the Public Administration Division as well as the 2018 allocation of 6.2 positions from the legislature's Native Hawaiian Health Academy initiative, with 4.2 of those positions consisting of instructional faculty lines housed in this new unit. This has resulted in a fully functioning academic division that already houses fifteen (15) faculty lines and a lab coordinator position. While the academic program falls under the purview of the OVCAA, the new division is led by a faculty Division Chair and governed by divisional bylaws.

#### B.S. in Natural Sciences Core Program Organization

The B.S. in Natural Sciences degree features a robust set of Core Requirements, including year-long sequences (two courses each) in Calculus, Chemistry, Biology, and Physics (see Table 4).

Table 4. Core Requirements for the B.S. in Natural Sciences
Natural Sciences Lower Division Core Requirements: 44 credits

Up to 10 credits in the Lower Division Requirement can also fulfill General Education Requirements!

Credits	Course Alpha / Number / Title
3	ENG 200 Composition II (or equivalent) with a "C-" or higher
4*	CHEM 161/ 161 L General Chemistry I and Lab (can also satisfy general gg DP/DY above) Prorequisite: Placement into ENG 100 or concurrent enrollment in ENG 100T and MATH 103 with a C or higher or concurrent enrollment in MATH 241
4	CHEM 162/ 162 L General Chemistry II and Lab Prerequisite: CHEM 161 with a C or higher
4*	MATH 241 Calculus I Prerequisite: Grade of "C" or better in MATH 140 or equivalent; or placement into MATH 241
4	MATH 242 Calculus II Prerequisite: Grade of "C" or better in MATH 241 or equivalent; or placement into MATH 242
4	PHYS 151/ 151L College Physics I and Lab or PHYS 170/ 170 L General Physics I and Lab Prerequisito: MATH 140 with a C or better, or Math 241 with a C or better or concurrent with Math 241
4	PHYS 152/ 152 L College Physics II and Lab or PHYS 272/ 272 L General Physics II and Lab Prorequisite: PHYS 151/151L with a C or better, or PHYS 170/170L with a C or better and Math 242 with a C or better or concurrent with Math 242
4*	BIOL 171/ 171L Introduction to Biology I and Lab (can also satisfy general gg DB above) Prerequisite: Completion of or concurrent enrollment in either CHEM 151 or 181
4	BIOL 172/ 172L Introduction to Biology II and Lab Prerequisite: BIOL 171/171L
3	ICS 101 Digital Tools for the Information World -OR- ICS 111 Introduction to Computer Science Prerequisite: ICS 101 or equivalent, all with a grade of C or better, or consent of instructor
3	Select one course from the following: HLTH 204 Introduction to Native Hawaiian & Indigenous Health and Healing HLTH 205 Hawaiian Ways of Healing NS 2XX Interdisciplinary Indigenous Sciences and Health
3	ICS 101 Digital Tools for the Information World  OR- ICS 111 Introduction to Computer Science  Prorequisite: ICS 101 or equivalent all with a grade of C or better, or consent of instructor
1	NS 1XX Transdisciplinary Introduction to Laboratory Methods
2	NS 2XX Transdisciplinary Introduction to Research Methods

#### Outcomes

#### Concentrations

The University of Hawai'i—West O'ahu plans to offer its students at least three subject-area concentrations within the Bachelor of Science in Natural Sciences degree: Applied Mathematics, Life Sciences, and Health Sciences. Since concentrations operate below the degree level and do not constitute academic programs as defined in UH Executive Policy 5.201, the UH West O'ahu Chancellor exercises jurisdiction over their establishment. Similarly, the campus accrediting body (WSCUC) does not recognize concentrations as degree programs and therefore does not subject them to a formal "substantive change" approval process. The creation of subject-area concentrations, however, greatly benefits students by allowing them to

focus on their specific area of interest while better preparing them for their chosen career path. Three concentration descriptions are presented here for your information:

#### **Applied Mathematics**

Students concentrating in Applied Mathematics will complete forty-one (41) credits of mathematics courses beyond the eight (8) credits required in the General Education and BSNS lower division core requirements. This includes courses such as Mathematical Modeling, Linear Algebra, Applied Probability, and Applied Statistics. Applied Mathematics differs from what is currently offered at the other four-year University of Hawai'i campuses because it combines applied mathematical thinking interconnecting with various subjects to discover real-world solutions and make a global impact in areas such as a mathematical model for the potential of a Zika outbreak in O'ahu, a mathematical model of the 2015 Dengue Outbreak in Hawai'i, and responding to the challenges of climate change by enhancing the opportunities for clean energy usage.

Students who concentrate in Applied Mathematics will develop a high level of proficiency in mathematical and computational knowledge through tools such as differential equations, probability, matrices, and computer programing. Upon completion of the BSNS Applied Mathematics concentration, students will be well prepared to enter the workforce in areas such as actuarial science, computer science, quantitative finance, epidemiology, and climate science.

#### Life Sciences

The Life Sciences concentration differs from what is currently offered at other four-year campuses in its interdisciplinary approach in training students to utilize the scientific method as an investigative tool to solve real-world problems. The concentration will provide students with a broad foundation in life sciences in preparation for graduate studies or career options as aquatic biologists, education specialists, research coordinators, field technicians, field logistics specialists, coral nursery specialists, and aquarium biologists.

Students concentrating in Life Sciences will complete thirty-six (36) credits of courses beyond the General Education and BSNS core with several electives to allow students to gain experience in their chosen area of interest. This includes courses in biology (i.e. Genetics, Statistics for Biologists, Methods in Biology), zoology, cell and molecular biology, physiology (i.e. Anatomy and Physiology), botany, marine biology (i.e. Corals and Coral Reefs), ecology (i.e. Marine Ecology, Island Ecosystems), and microbiology. Students who concentrate in Life Sciences will develop a high level of proficiency in laboratory techniques, research methods, experimental design, and science communication. Upon graduation, they will be well situated

to enter career fields as biologists, research coordinators, and specialists in connection with natural resource management, science policy, and science communication.

#### **Health Sciences**

The UH System understands the need for more entry-level Health Science training opportunities, including baccalaureate degrees in the areas of Long Term Care, Health Information Management, Pre-Health Professions, and Hawaiian and Indigenous Health and Healing—none of which are currently offered in the UH System. The design of the program bridges and articulates with the UH Community Colleges, the DOE's Early College programs, and University of Hawai'i graduate and professional schools. Additionally, supporting and expanding existing Applied Science concentrations in Respiratory Care and Community Health are a priority. This degree will provide high-level training to undergraduates and future healthcare providers who, once deployed in the workforce, will become critical members of the healthcare team, providing high quality clinical care and creating more marketable jobs for baccalaureate graduates that offer a sustainable salary and are needed for the transformation of health care in Hawai'i.

Students concentrating in Health Sciences will complete between thirty-five (35) and fifty (50) credits of Health Science related coursework beyond the credits required for General Education and the BSNS core. This includes courses that educate students on clinical healthcare (i.e. Survey of Health Professions, Introduction to Patient Care and Clinical Skills), factors related to human health and disease (i.e. Community Epidemiology & Population Health, social sciences, psychology), the human body (i.e. Human Anatomy & Physiology, Exercise Physiology, Health and Wellness), and cultural knowledge (i.e. Cultural Competence in Healthcare, Introduction to Native Hawaiian and Indigenous Health and Healing). These courses supplement the solid science background (biology, chemistry, physics) of the BSNS core. The six-credit capstone has been developed to accommodate the large amount of clinical hours required for these students to apply to health profession graduate schools. Upon completion of the BSNS with a Health Sciences concentration, students will be able to demonstrate appropriate laboratory techniques, triage methods based on CPR/AED/First Aid, and correct handling of blood borne pathogens (via OSHA certification). The concentration also has a clinical cognate that provides students the opportunity to develop necessary skills to complete and direct patient care related to medical procedures and privacy protocol as outlined by HIPPA requirements. Utilizing problem-based learning techniques, students will develop professional communication, pertinent behavior, and teamwork skills in preparation for graduate studies in health professions or career options in health education, hospital management, health administration, health and wellness, and school health programs.

#### Section IV: Strengthening STEM Programs across UH-System

In line with the UH System IAFP, UH West O'ahu's proposed BSNS degree with concentrations in Applied Mathematics, Life Sciences, and Health Sciences will strengthen STEM Programs across the UH system by:

- 1. Establishing a pipeline for UHCC ASNS graduates to UH West O'ahu.
- 2. Increasing the Native Hawaiian and underrepresented student populations in STEM fields from the West O'ahu region.
- 3. Preparing graduates for the workforce in the West O'ahu region and the state of Hawai'i.
- 4. Preparing UH West O'ahu students for graduate school at UH Mānoa, including JABSOM, UH Hilo, or other institutions.

The establishment of the BSNS degree at UH West O'ahu aligns with the STEM program initiatives occurring at the UH Community Colleges. The BSNS degree will serve as an option for ASNS graduates to continue their undergraduate education culminating in a bachelor's degree. As of Fall 2018, there were 1,215 declared ASNS majors across the UH System (See Table 1 on p. 2). Through the creation of the BSNS degree, UH West O'ahu seeks to create a viable academic pathway for these community college students, the largest numbers of whom reside in the West O'ahu region, particularly in 'Ewa Beach and Kapolei (See Figure 2 on p. 3). This means that UH West O'ahu is situated in the prefect geographic location to serve the UH System's pool of ASNS students and fulfill the charge of the State Legislature to provide a platform to increase the presence of underrepresented student populations in STEM fields.

The implementation of the BSNS degree at UH West O'ahu also supports the Hawai'i's 21<sup>st</sup>-Century workforce needs. Section II: Student Demand presented data from the State's Department of Labor and Industrial Relations, which projects steady increases in the number of job openings in occupational fields that require skills in mathematics, computer science, life sciences, and physical sciences. The BSNS degree would prepare UH West O'ahu graduates for the state workforce, allowing many of them to pursue promising STEM careers in their own backyard.

UH West O'ahu has been working in collaboration across the UH System and has received letters of support from the UH Mānoa and UH Hilo Mathematics Departments (See **Appendices J and K**). Both UH Mānoa and UH Hilo have degrees in Pure Mathematics, but not in Applied Mathematics, so the concentration will be unique within the UH system. UH Mānoa Mathematics Department Chair Wayne Smith noted in the letter of support that UH Mānoa

does not offer undergraduate degrees in Applied Mathematics, although their graduate program was recently revised to incorporate Applied Mathematics as a core discipline. Further, Smith wrote: "Applied Mathematicians are in high demand by many different types of organizations and industries, and indeed, mathematics and computational science are utilized in nearly all fields of human endeavor." UH Hilo Mathematics Department Chair Efren Ruiz penned: "Offering a degree in Natural Sciences with a concentration in Applied Mathematics will complement the currently established MATH degree program offered at UHH that concentrate on a traditional degree in mathematics (for those interested in an advanced degree) or one tailored for secondary teachers. Applied mathematics differs from traditional (Pure) mathematics as it focuses on mathematical methods that are used in sciences, industry, and business. Having a degree in Applied Mathematics would benefit the UH system."

The BSNS degree would further strengthen collaboration between UH West O'ahu and UH Mānoa through the emerging partnership with the Department of Native Hawaiian Health (DNHH), John A. Burns School of Medicine (JABSOM), and the Native Hawaiian Health Academy (NHHA). The Hawai'i State Legislature allocated 6.2 new positions at UHWO in collaboration with NHHA and JABSOM in 2018. The goal of this partnership aligns with the shared mission of the IAFP and campus to bolster the matriculation and graduation of Native Hawaiian students. JABSOM Dean Jerris Hedges and Department of Native Hawaiian Health Chair Keawe'aimoku Kaholokula stressed the following in support of this proposal: "It is important that students in Hawaii have multiple opportunities to prepare for a career in a scientific field. Practical bachelor degrees that incorporate cultural values and perspectives and are well integrated with our public high schools will help create a stronger workforce for Hawaii's businesses. We expect that many of these students will progress to graduate programs in the life sciences and professional degrees in a health care field (e.g., medical doctorate, nursing practice doctorate, of MS/PhD in the life sciences)."<sup>7</sup>

# Section V: Quality Assurance and Program Effectiveness

The BSNS will be the first STEM degree program offered at UH West O'ahu. Its basic and applied core couples with a transdisciplinary approach that is defined by quality measures presented through the Lumina Foundation's Degree Qualifications Profile (DQP).<sup>8</sup> In short, the DQP is a structured process that guides our faculty to collect information/data so that they

<sup>&</sup>lt;sup>7</sup> This quotation was taken from an email exchange between JABSOM Dean Jerris Hedges, Department of Native Hawaiian Health Chair Keawe'aimoku Kaholokula, and UH West O'ahu Chancellor Maenette Benham on November 10, 2018.

<sup>&</sup>lt;sup>8</sup> The Lumina Foundation, "Degree Qualifications Profile," 2018, <a href="http://degreeprofile.org/">http://degreeprofile.org/</a> retrieved November 12, 2018.

can better understand what the students in a degree program should know and what they should be able to do. Due to space limitations, the full complexity of this STEM degree development is not shown here; however, a comprehensive review of the BSNS core coursework reveals learning in all five (5) DQP intellectual skill areas: specialized knowledge, broad and integrative knowledge, applied and collaborative learning, intellectual skills, and, to a lesser extent, civic and global learning. (See Figure 4 below for the Applied Mathematics DQP "Spider Graph," and **Appendices L** and **M** for Health Sciences and Life Sciences Spider Graphs).

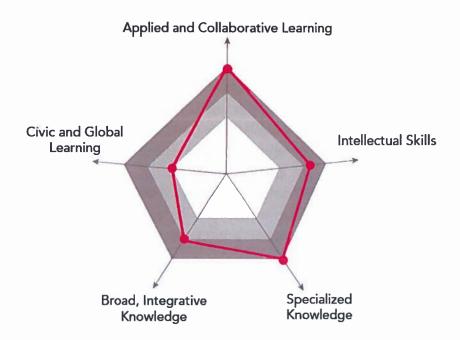


Figure 4. UH West O'ahu BS in Natural Sciences Applied Mathematics Spider Graph

The web shape visually represents the combination of proficiencies from each of the five areas of learning that collectively define the requirements for the proposed Bachelor of Science in Natural Science degree program with a concentration in Applied Mathematics. Its overall symmetry indicates a fairly balanced program of study but with a profile shape that depicts focused development on particular basic proficiencies more than others. This is consistent with an applied, transdisciplinary degree program aimed at building strong mathematical and scientific backgrounds.

The proposed BS in Natural Sciences will adhere to the UH System program review requirements established in EP 5.201 and EP 5.202, conducting a full cycle of reviews at least once every seven (7) years, while producing annual reports of program data, and fulfilling all of the program review expectations of WSCUC, UH West O'ahu's accrediting body. The campus review process requires programs to determine and report progress in

student achievement metrics, regularly assess student success in meeting program learning outcomes, review current curriculum and recommend changes, and determine future need for additional resources. Program effectiveness will be determined by looking at student achievement data. Student achievement metrics include the number of declared majors, annual degree attainment, student persistence rates, time-to-degree averages, and the number of students who graduate within five (5) years. The attainment of the program's student learning outcomes will be assessed as part of the established and ongoing campuswide assessment process.

# Resources & Efficiency

#### Section VI: Cost Analysis

With the newly opened Administration/Health Sciences building and the addition of 6.2 positions as part of the 2018 legislative appropriation for the Native Hawaiian Health Academy, UH West O'ahu has the personnel resources required to establish and maintain a B.S. in Natural Sciences degree program immediately:

Table 5. Staffing for B.S. in Natural Sciences
Status
Rank

Position #	Status	Rank	Discipline
76254	Occupied	I-3	Community Health
76256	Occupied	1-3	Physiology
76265	Occupied	1-3	Biology
76266	Occupied	I-5	Chemistry
76267	Occupied	1-3	Biology
76290	Occupied	1-4	Mathematics
76291	Occupied	1-4	Mathematics
76306	Occupied	I-3	Mathematics
76317	Occupied	I-3	Mathematics
76327	Occupied	1-3	Health Information Management
76329	Occupied	1-4	Allied Health
76379	Active Search (new line)	1-3/4	Health Information Management
76381	Active Search (new line)	1-3/4	Indigenous Health and Sciences
76382	Active Search (new line)	1-3/4	Chemistry
76383	Active Search (new line)	1-3/4	Physics
77657	Occupied	APT	Lab Coordinator

<u>Library resources</u>: UH West O'ahu subscribes to a number of scientific journals and databases available through the campus library, including Science Direct, Science Reference Center, and Science Magazine. Additional software has been purchased with extramural funding. The Mathematics and Science faculty have actively sought grant awards to support the campus'

capacity for STEM learning. Faculty also use open source textbooks and materials for a number of courses, including the "Book of Proof" for MATH 321: Intro to Advanced Mathematics. 9

Physical facilities and equipment: The UH West O'ahu campus offers a full Chemistry lab, a Physical Sciences Lab, and a Biology lab, all with adjacent preparation rooms. The institution has purchased equipment through Title III grants and has acquired many of the devices required to support a B.S. in Natural Sciences. The completion of the Administration/Health Sciences Building in October 2018 has brought three more fully furnished labs online for Cellular Biology, Microbiology, and Anatomy and Physiology. Courses will be taught in the new labs starting in January 2019. The state-of-the art facilities and labs will continue to require new equipment and supplies, maintenance of the existing equipment, and preventative measures. Equipment and supplies already in place include a mass spectrometer, a nuclear magnetic resonance spectroscopy, microscopes and incubators, an autoclave, and plastic anatomical models. Operation and maintenance costs for these items amount to approximately \$3,000 per year for Chemistry, \$35,000 per year for Biology, \$17,000 per year for Anatomy and Physiology.

Tuition fees resulting from the creation of new courses in Mathematics, Life Sciences, and Health Sciences will be the main source of funding for the program (see Table 6). In addition, grants supporting STEM programs (e.g., NSF TCUP and Improving Undergraduate STEM Education – IUSE) will be pursued to support recruitment, instructional support, internships and research mentorships. The campus has also applied for a Department of Defense grant created to provide STEM equipment to Minority-Serving Institutions.

Table 6. Projected Expenses and Revenues for the BSNS Degree displays the anticipated new revenues and expenses resulting from the creation of a BSNS degree and presents these figures adjacent to the existing expenses involved in delivering all current course offerings in the Natural Sciences at UH West O'ahu (including mathematics, life science, and health science disciplines.) The current courses are provided in support of the institution's General Education program and its Bachelor of Education degree. The projected new expenses do not include funding for the sixteen (16) existing positions—fifteen (15) faculty lines and one APT line—already in place to support UH West O'ahu's course offerings in mathematics and science. The legislature's 2018 allocation of position lines and corresponding General Fund support stemming from the Native Hawaiian Health Academy (NHHA) initiative has significantly reduced the anticipated expenses of establishing this degree. As the major count grows, the campus

<sup>&</sup>lt;sup>9</sup> Richard Hammack, "Book of Proof," 3<sup>rd</sup> edition, 2018, <a href="http://www.people.vcu.edu/~rhammack/BookOfProof/">http://www.people.vcu.edu/~rhammack/BookOfProof/</a> retrieved November 12, 2018.

expects to require modest lecturer support and three additional Instructional Faculty lines by FY 2024-25.

Table 6. Projected Expenses and Revenue for the BSNS Degree Current Expenses and Revenues -

**Natural Sciences Courses** 

**New Expenses and Revenues - BSNS Degree** 

The property of	Current				13015	10.000	
-14	Year		Proje	cted Years	(new cos	ts) 1/	
	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
Instructional faculty FTE 2/	16.0	0.0	1.0	2.0	2.0	2.0	3.0
Faculty salary costs (w/o							
fringe, 13 level) 3/	\$950,136	\$0	\$64,896	\$129,792	\$129,792	\$129,792	\$194,688
Lecturer FTE	9.92	1.5	1.13	0.75	1.25	1.75	2.0
Lecturer costs (w/o fringe, LB level)	\$448,630	\$69,228	\$52,947	\$35,298	\$58,830	\$82,362	\$94,128
Library resources	\$20,338	\$21,355	\$23,277	\$25,372	\$27,655	\$30,144	\$32,857
Equipment operations and							
maintenance	\$55,000	\$60,500	\$66,550	\$73,205	\$80,526	\$88,578	\$97,436
Lab materials	\$50,000	\$2,080	\$15,142	\$20,247	\$25,737	\$32,898	\$40,490
TOTAL Expenses	\$1,524,104	\$153,163	\$222,812	\$283,914	\$322,540	\$363,774	\$459,599
Headcount Enrollment							
Majors	N/A	20	29	39	53	68	80
Classes Offered	135	12	15	18	22	26	34
Semester Hours	356	36	45	54	66	78	102
Student Semester Hours	5,725	720	900	1,080	1,320	1,560	2,040
Tuition Rate/Credit	\$303	\$306	\$309	\$312	\$315	\$318	\$321
Total Tuition Revenue	\$1,734,675	\$220,320	\$278,100	\$336,960	\$415,800	\$496,080	\$654,840

<sup>1/</sup> Data for projected years include new costs, positions, and enrollments that are projected to incur at onset of the BSNS degree program.

Source: UH West Oahu IRO, Banner ODS IRO SOCAD. Classes exclude directed study, internships, capstones. Data as of 2/5/2018

Instructional Faculty salary costs are based on eighteen (18) credits per year, since tenured and tenure-track faculty receive three (3) credits of release per semester perform research and service duties. Projected salaries are based on the published rates for 9-month, Rank 3 Faculty listed in Article XXI.A of the 2017-21 UHPA-BOR collective bargaining agreement. The Lecturer FTE figures were calculated from a base of twenty-four (24) credits per year, with projected salaries reflecting the published rates for Step B Lecturers listed in Article XXI.D of the 2017-21 UHPA-BOR collective bargaining agreement. We are anticipating a 9% annual increase in library database charges and a 10% annual increase in equipment operations and maintenance.

<sup>2/</sup> Instructional count includes four newly appropriated positions in support of a Native Hawaiian Health Academy (NHHA) for which active searches are underway.

<sup>3/</sup> Current faculty salary costs include one APT Lab Coordinator but not the four NHHA faculty lines currently under recruitment.

Projected tuition rates are based on an annual increase of 1.0%, in line with the BORapproved tuition schedule that runs through AY19-20.

#### **Note on Risk Assessment**

The risk assessment conducted by the Office of the Vice Chancellor for Academic Affairs determined that there were no additional risks over and above those with current courses. The campus already runs science lab classes as part of its General Education program and in support of its Bachelor of Education degree.

#### **UH West O'ahu**

# Proposal for Bachelor of Science in Natural Sciences Degree Appendices: Table of Contents

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THE SENATE TWENTY-NINTH LEGISLATURE, 2018 STATE OF HAWAII S.B. NO. S.D. 2

# A BILL FOR AN ACT

RELATING TO AN UNDERGRADUATE HEALTH SCIENCES ACADEMY.

#### BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1	SECTION 1. The legislature finds that current data suggest
2	that native Hawaiians are less likely to attend college in
3	comparison to other ethnic groups due to low levels of
4	preparation and inadequate finances. For native Hawaiian
5	students who attend college, graduation and retention rates are
6	significantly lower than the general student population.
7	The legislature further finds that for many native Hawaiian
8	students, a strong desire to live close to family, participation
9	in family activities at home, and cultural pressures are factors
10	that contribute to non-completion of a college degree. In
11	addition, multiple studies testing for factors leading to
12	retention have identified that the more involved native Hawaiian
13	students are in school activities and the more interaction they
14	have with faculty and their peers, the more likely they are to
15	persevere in their higher education. The development of a
16	health sgionges academy with a focus on native Hawaiian student

- 1 retention, would target integration of the student and their
- 2 family in school activities.
- 3 The legislature further finds that it has been reported
- 4 that thirty per cent of native Hawaiian and Pacific Islander
- 5 students have parents with high school degrees as the highest
- 6 education level, and eighteen per cent have parents with a
- 7 bachelor's degree or higher.
- 8 Moreover, health care sector employment is projected to
- 9 increase by more than one hundred sixty per cent by 2040, and
- 10 the wages in that sector are typically more consistent with a
- 11 livable wage in Hawaii. However, these jobs typically require a
- 12 bachelor's degree at minimum. Currently only about fifteen per
- 13 cent of native Hawaiians or Pacific Islanders hold bachelor's
- 14 degrees.
- To address these issues, S.R. No. 60, S.D. 1, regular
- 16 session of 2014, created the native Hawaiian health task force
- 17 to improve the health of native Hawaiians and Pacific Islanders.
- 18 The goal of the task force was to articulate priorities to
- 19 advance health care equity for native Hawaiians which would in
- 20 turn improve health care for all people of Hawaii. The work
- 21 conducted by the task force was community- and land-focused and



# Appendix A: Twenty-Ninth Legislature of the State of Hawai'i, Senate Bill 2320 2320 S.D. 2 H.D. 1

- 1 emphasized native Hawaiian values and aspirations such as
- 2 examining past efforts to improve the health of native
- 3 Hawaiians. The task force used na pou kihi as the cultural
- 4 framework to organize its findings and recommendations. Na pou
- 5 kihi reflects the necessary four corner posts of a hale (home)
- 6 necessary to support the weight of the structure and everyone
- 7 who resides under its roof. The framework and recommendations
- 8 were widely discussed and embraced by government agencies,
- 9 community members, and affected stakeholders.
- 10 One of the four corner posts of na pou kihi, ka wai ola,
- 11 focuses on achieving social justice through educational
- 12 achievement and economic success for native Hawaiians. Native
- 13 Hawaiians have a long history of valuing learning and the
- 14 pursuit of knowledge, which are celebrated in moolelo (history)
- 15 and exemplified in the phenomenal achievements of native
- 16 Hawaiian kupuna. Economically, native Hawaiian ancestors
- 17 developed a sophisticated system of resource management that
- 18 ensured equitable access to the riches of the aina (land), wai
- 19 (fresh water), and kai (ocean) for all. All members of society
- 20 had a clear and well-defined role that contributed to the
- 21 welfare of the community. Ka wai ola provides the foundation



1	for securing the educational and economic benefits necessary for
2	native Hawaiians to thrive and flourish in society.
3	The legislature further finds that establishment of a
4	health sciences academy with a focus on native Hawaiian student
5	retention would promote integration of students into the
6	academic college milieu and serve as a model for other
7	underrepresented groups.
8	This Act reflects the position of the legislature on nativ
9	Hawaiian health care. The legislature supports:
10	(1) Collaborative efforts to ensure that funding for
11	native Hawaiian health care continues;
12	(2) Native Hawaiians and Pacific Islanders by focusing on
13	essential social and cultural determinants that
14	improve health outcomes amongst the State's indigenou
15	population;
16	(3) Options to improve health care for keiki and resident
17	in rural areas; and
18	(4) Collaborative efforts to provide better dental care
19	for keiki and adults throughout the State's
20	communities

1	The purpose of this Act is to develop an undergraduate
2	health sciences academy within the University of Hawaii system
3	to target the recruitment and retention of native Hawaiian,
4	Pacific Islander, and first generation college students.
5	SECTION 2. Chapter 304A, Hawaii Revised Statutes, is
6	amended by adding a new section to part IV, subpart M, to be
7	appropriately designated and to read as follows:
8	"§304A- Undergraduate health sciences academy pathway.
9	(a) There shall be an undergraduate health sciences academy
10	established within the University of Hawaii system to target the
11	recruitment and retention of native Hawaiian, Pacific Islander,
12	and first generation college students. The undergraduate health
13	sciences academy shall be administered by the University of
14	Hawaii-West Oahu and John A. Burns School of Medicine and shall
15	offer such courses of study as may be deemed appropriate in
16	collaboration with other University of Hawaii campuses.
17	(b) The mission of the undergraduate health sciences
18	academy shall be to eliminate health disparities in native
19	Hawaiian, Pacific Islander, and other underserved communities by
20	promoting access to quality health sciences education pathways
21	at the early college and undergraduate levels.

1	(C)	The following native Hawaiian principles shall guide
2	the acade	mic programs:
3	(1)	Hoomalamalama - education strategies: students shall
4		be directed to the health science pathway that best
5		aligns with their career goals;
6	(2)	Hoomana - empowerment strategies: develop health
7		leadership curriculum, foster mentorship programs, and
8		implement community service initiatives;
9	(3)	Hoopili - engagement strategies: promote ohana
10		(family) involvement, the use of technology to engage
11		the community and the family in the learning process,
12		and the creation of community-based internships and
13		service projects; and
14	(4)	Hookahuli - transformation strategies: creation of
15		internships and the incorporation of technology
16		throughout the program.
17	<u>(d)</u>	No later than twenty days prior to the convening of
18	the regul	ar session of each odd-numbered year, the University of
19	Hawaii-We	st Oahu shall submit a report to the legislature on
20	findings	his the early college and undergraduate health agicares

- 1 academy pathway regarding the educational outcomes, including
- 2 enrollment and graduation data."
- 3 SECTION 3. There is appropriated out of the general
- 4 revenues of the State of Hawaii the sum of \$ or so much
- 5 thereof as may be necessary for fiscal year 2018-2019 for
- 6 permanent faculty and staff positions at the undergraduate
- 7 health sciences academy to be administered by the University of
- 8 Hawaii-West Oahu and John A. Burns School of Medicine.
- 9 The sum appropriated shall be expended by the University of
- 10 Hawaii-West Oahu for the purposes of this Act.
- 11 SECTION 4. New statutory material is underscored.
- 12 SECTION 5. This Act shall take effect on July 1, 2112.

Appendix A: Twenty-Ninth Legislature of the State of Hawai'i, Senate Bill 2320 S.D. 2 S.D. 2

#### Report Title:

UH; Health Sciences; Native Hawaiians; Pacific Islanders; Report; Appropriation

#### Description:

Establishes an undergraduate health sciences academy to be administered by the University of Hawaii-West Oahu and John A. Burns School of Medicine to increase recruitment and retention of Native Hawaiian, Pacific Islander, and first generation college students. Requires the University of Hawaii-West Oahu to submit a report to the legislature regarding educational outcomes. Appropriates funds. (SB2320 HD1)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

#### **Appendix B: Program Sheet for Applied Mathematics**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

# **Bachelor of Science in Natural Sciences, Applied Mathematics**

The goal of academic advising is to further enhance the educational mission of the university, and create quality, accessible advising partnerships with all students in a positive environment that supports student success. This advising sheet is for tracking purposes toward degree completion and is subject to change. Students also may track their academic progress via STAR Degree Check through MyUH at <a href="mayuh.hawaii.edu">myuh.hawaii.edu</a>. Academic Advising appointments may be scheduled by calling <a href="mayuh.hawaii.edu">808-689-2689</a> or toll-free from neighbor islands at <a href="mayuh.hawaii.edu">866-299-8656</a>.

Graduation Requirements (see the 2018-2019 catalog for any additional graduation requirements):

□ 45 Upper Division Credits Minimum □ 3 Upper Division Writing Intensive Courses □ 2.0 UHWO GPA

□ 120 Total Credits Minimum □ Focus Requirements (OC, HAP, ETH) □ 2.0 CONCENTRATION GPA

☐ 30 UHWO Credits

#### **General Education Requirements: 31 credits**

Credits	Course Alpha / Number / Title
3	Foundations Written Communications (FW) ENG 100 Composition I
3	Foundations of Quantitative Reasoning (FQ) MATH 241 Calculus I
6	Foundations Global and Multicultural Perspectives (FG): 6 credits from two <u>different</u> groups (A, B, C):  *Group A: Primarily before 1500 CE (e.g.; HIST 151 or ANTH 151)  *Group B: Primarily after 1500 CE (e.g.; HIST 152 or ANTH 152)  *Group C: Pre-history to present
6	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas
3	Diversification Social Sciences (DS): 6 credits from two different areas. (recommended H-Focus)
3	Diversification Social Sciences (DS): Different area from above. (recommended O-Focus)
3	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB): BIOL 171
3	3 credits from the physical sciences (DP): CHEM 161
1	1 credit of laboratory (DY): CHEM 161L

#### Natural Sciences Lower Division Core Requirements: 34 - 44 credits

\*Up to 10 credits in the Lower Division Requirement can also fulfill General Education Requirements

Credits	Course Alpha / Number / Title			
3	ENG 200 Composition II (or equivalent) with a "C-" or higher			
0-4*	CHEM 161/ 161 L General Chemistry I and Lab (can also satisfy general ed DP/DY above)  Prerequisite: Placement into ENG 100 or concurrent enrollment in ENG 100T and MATH 103 with a C or higher or concurrent enrollment in MATH 241			
4	CHEM 162/ 162 L General Chemistry II and Lab Prerequisite: CHEM 161 with a C or higher			
0-4*	MATH 241 Calculus I Prerequisite: Grade of "C" or better in MATH 140 or equivalent; or placement into MATH 241			
4	MATH 242 Calculus II Prerequisite: Grade of "C" or better in MATH 241 or equivalent; or placement into MATH 242			
4	PHYS 151/ 151L College Physics I and Lab or PHYS 170/ 170 L General Physics I and Lab Prerequisite: MATH 140 with a C or better, or Math 241 with a C or better or concurrent with Math 241			
4	PHYS 152/ 152 L College Physics II and Lab or PHYS 272/ 272 L General Physics II and Lab Prerequisite: PHYS 151/151L with a C or better, or PHYS 170/170L with a C or better and Math 242 with a C or better or concurrent with Math 242			
0-4*	BIOL 171/ 171L Introduction to Biology I and Lab (can also satisfy general ed DB above) Prerequisite: Completion of or concurrent enrollment in either CHEM 151 or 161			
4	BIOL 172/ 172L Introduction to Biology II and Lab Prerequisite: BIOL 171/171L			
3	ICS 101 Digital Tools for the Information World  -OR- ICS 111 Introduction to Computer Science			

## **Appendix B: Program Sheet for Applied Mathematics**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

3	Select one course from the following: HLTH 204 Introduction to Native Hawaiian & Indigenous Health and Healing HLTH 205 Hawaiian Ways of Healing NS 2XX Interdisciplinary Indigenous Sciences and Health
1	NS 1XX Transdisciplinary Introduction to Laboratory Methods
2	NS 2XX Transdisciplinary Introduction to Research Methods

#### Natural Sciences Upper Division Core Requirements: 7 credits

Credits	Course Alpha / Number / Title
4	MATH 304 Mathematical Modeling Prerequisite: Grade of "C" or better in Math 242
3	NS 4XX Interdisciplinary Seminar

## Applied Mathematics Lower Division Concentration Requirement: 4 credits

Credits	Course Alpha / Number / Title
4	MATH 245 Multivariable Calculus

### Applied Mathematics Upper Division Concentration Requirements: 24 credits

Credits	Course Alpha / Number / Title
3	MATH 307 Linear Algebra and Ordinary Differential Equations (WI) Prerequisite: MATH 243 or concurrent enrollment; or instructor consent
3	MATH 321 Introduction to Advanced Mathematics (WI) Prerequisite: ENG 200 and MATH 243 or concurrent; or instructor consent
3	MATH 327 Origins of Mathematics (ETH and OC Focus)
3	MATH 361 Applied Probability Theory Prerequisite: MATH 242; or consent of instructor
3	MATH 331 Real Analysis Prerequisite: MATH 242 and MATH 321 or concurrent; or instructor consent
3	MATH 4XX Methods in Applied Mathematics Prerequisite: MATH 242 or equivalent. MATH 311 or MATH 321 recommended
3	MATH 405 Ordinary Differential Equations and Stability Theory Prerequisite: MATH 307 or 311; or instructor consent
3	MATH 461 Applied Statistics Prerequisite: MATH 361; or consent of instructor

#### **Applied Mathematics Concentration Electives: 9 credits**

MATH 301 Discrete Mathematics
MATH 351 Foundation of Euclidean Geometry
MATH 407 Numerical Analysis
MATH 411 Linear Algebra
MATH 412 Intro to Abstract Algebra I

MATH 413 Intro to Abstract Algebra II MATH 431 Advanced Calculus MATH 444 Complex Analysis MATH 496 Independent Research

Credits	Course Alpha / Number / Title
3	
3	
3	

#### **Capstone Requirement: 3 credits**

Credits	Course Alpha / Number / Title
3	NS 486A Senior Project or NS 490A Senior Practicum

# **Appendix B: Program Sheet for Applied Mathematics**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

#### **Elective Requirements: 0-8 credits**

\*See a Student Services Academic Advisor

Credits	Course Alpha / Number / Title
3	
3	
2	

Dr. Esther Widiasih (widiasih@hawaii.edu), Dr. Kamuela Yong (kamuela.yong@hawaii.edu), Dr. Michael Furuto (mfuruto@hawaii.edu), Dr. Veny Liu (venyliu@hawaii.edu) are the Faculty contacts for this concentration.

UH West O'ahu Student Program Sheet for Academic Year 2019-20

# **Bachelor of Science in Natural Sciences, Life Sciences**

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- ☐ 3 Upper Division Writing Intensive Courses
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- □120 Total Credits Minimum
- □ Focus Requirements (OC, HAP, ETH) □ 2.0 CONCENTRATION GPA

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6	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas
3	Diversification Social Sciences (DS): 6 credits from two different areas (recommended H-Focus)
3	Diversification Social Sciences (DS): Different area from above. (recommended O-Focus)
3	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB): BIOL 171
3	3 credits from the physical sciences (DP): CHEM 161
1	1 credit of laboratory (DY): CHEM 161L

#### Natural Sciences Lower Division Core Requirements: 34 - 44 credits

\*Up to 10 credits in the Lower Division Requirement can also fulfill General Education Requirements

Credits	Course Alpha / Number / Title
3	ENG 200 Composition II (or equivalent) with a "C-" or higher
0-4*	CHEM 161/ 161 L General Chemistry I and Lab (can also satisfy general ed DP/DY above) Prerequisite: Placement into ENG 100 or concurrent enrollment in ENG 100T and MATH 103 with a C or higher or concurrent enrollment in MATH 241
4	CHEM 162/ 162 L General Chemistry II and Lab Prerequisite: CHEM 161 with a C or higher
0-4*	MATH 241 Calculus I Prerequisite: Grade of "C" or better in MATH 140 or equivalent; or placement into MATH 241
4	MATH 242 Calculus II Prerequisite: Grade of "C" or better in MATH 241 or equivalent; or placement into MATH 242
4	PHYS 151/ 151L College Physics I and Lab or PHYS 170/ 170 L General Physics I and Lab Prerequisite: MATH 140 with a C or better, or Math 241 with a C or better or concurrent with Math 241
4	PHYS 152/ 152 L College Physics II and Lab or PHYS 272/ 272 L General Physics II and Lab Prerequisite: PHYS 151/151L with a C or better, or PHYS 170/170L with a C or better and Math 242 with a C or better or concurrent with Math 242
0-4*	BIOL 171/ 171L Introduction to Biology I and Lab (can also satisfy general ed DB above)  Prerequisite: Completion of or concurrent enrollment in either CHEM 151 or 161
4	BIOL 172/ 172L Introduction to Biology II and Lab Prerequisite: BIOL 171/171L
3	ICS 101 Digital Tools for the Information World  -OR- ICS 111 Introduction to Computer Science Prerequisite: ICS 101 or equivalent, all with a grade of C or better, or consent of instructor

#### **Appendix C: Program Sheet for Life Sciences**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

3	Select one course from the following: HLTH 204 Introduction to Native Hawaiian & Indigenous Health and Healing HLTH 205 Hawaiian Ways of Healing NS 2XX Interdisciplinary Indigenous Sciences and Health
1	NS 1XX Transdisciplinary Introduction to Laboratory Methods
2	NS 2XX Transdisciplinary Introduction to Research Methods

#### Natural Sciences Upper Division Core Requirements: 7 credits

Credits	Course Alpha / Number / Title
4	MATH 304 Mathematical Modeling Prerequisite: Grade of "C" or better in Math 242
3	NS 4XX Interdisciplinary Seminar

#### Life Sciences Lower Division Concentration Requirement: 16 credits

Credits	Course Alpha / Number / Title	
4	BIOL 265/265L Ecology and Evolution and Lab Prerequisite: Grade of "C" or better in BIOL 172/172L	
4	BIOL 275/275L Cell and Molecular Biology and Lab Prerequisite: Grade of "C" BIOL 171/171L and CHEM 272/272L	
4	CHEM 272/272L Organic Chemistry I and Lab Prerequisite: Grade of "C" or better in CHEM 162/162L	
4	CHEM 273/273L Organic Chemistry II and Lab Prerequisite: Grade of "C" or better in CHEM 272/272L	

#### Life Sciences Upper Division Concentration Requirements: 20 credits

Credits	Course Alpha / Number / Title
3	BIOL 310 Statistics for Biologists Prerequisite: MATH 135
4	BIOL 375/375L Genetics and Lab Prerequisite: BIOL 275 or consent of instructor
3	BIOL 365 Research Methods in Biology Prerequisite: BIOL 101 or BIOL 171
3	BIOL 390 Writing and Communicating for Life Sciences (WI)
3	BIOL 401 Ethics for Biology (ETH) Prerequisite: BIOL 101 or BIOL 171
4	BIOC 441/441L Biochemistry I and Lab Prerequisite: BIOL 275 and CHEM 273

#### Life Sciences Concentration Electives: 15 credits

**BIOL 3XX/3XX Advanced Human Phys & Lab BIOL 475 Animal Remains** 

**BIOL 3XX/3XX Clinical Anatomy** 

**BIOL 301 Marine Ecology** 

**BIOL 360 Island Ecosystems** 

BIOL 384/384L Human Skeletal Biology & Lab

**BIOL 490 Mathematical Biology Seminar** 

**BIOL 4XX Neurobiology** 

**BIOL 4XX Immunology** 

MICR 351/351L Biology of Microorganisms & Lab

PHYL 3XX/3XXL Exercise Physiology & Lab

**HLTH 3XX Structural Kinesiology** 

**ZOOL 410 Corals and Coral Reefs** 

**ZOOL 450 Natural History of the Hawaiian Islands** 

Credits	Course Alpha / Number / Title
3	
3	

# **Appendix C: Program Sheet for Life Sciences**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

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#### **Capstone Requirement: 3 credits**

Credits	Course Alpha / Number / Title	
3	NS 486A Senior Project or NS 490A Senior Practicum	

# Elective Requirements: NO ELECTIVES NEEDED, Program has 120 credits

Credits	Course Alpha / Number / Title
0	

Dr. Olivia George (<u>ogeorge@hawaii.edu</u>), Dr. Megan Ross (<u>mcolvin@hawaii.edu</u>) and Dr. Romine (<u>rromine@hawaii.edu</u>) are the Faculty contacts for this concentration.

## **Appendix D: Program Sheet for Health Sciences**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

# **Bachelor of Science in Natural Sciences, Health Sciences**

The goal of academic advising is to further enhance the educational mission of the university, and create quality, accessible advising partnerships with all students in a positive environment that supports student success. This advising sheet is for tracking purposes toward degree completion and is subject to change. Students also may track their academic progress via STAR Degree Check through MyUH at <a href="mayuh.hawaii.edu">myuh.hawaii.edu</a>. Academic Advising appointments may be scheduled by calling 808-689-2689 or toll-free from neighbor islands at 866-299-8656.

Graduation Requirements (see the 2018-2019 catalog for any additional graduation requirements):

- □ 45 Upper Division Credits Minimum □ 3 Upper Division Writing Intensive Courses □ 2.0 UHWO GPA
- □ 120 Total Credits Minimum □ Focus Requirements (OC, HAP, ETH)
- 2.0 CONCENTRATION GPA

□ 30 UHWO Credits

#### **General Education Requirements: 31 credits**

Credits	Course Alpha / Number / Title
3	Foundations Written Communications (FW) ENG 100 Composition I
3	Foundations of Quantitative Reasoning (FQ) MATH 241 Calculus I
6	Foundations Global and Multicultural Perspectives (FG): 6 credits from two <u>different</u> groups (A, B, C):  *Group A: Primarily before 1500 CE (e.g.; HIST 151 or ANTH 151)  *Group B: Primarily after 1500 CE (e.g.; HIST 152 or ANTH 152)  *Group C: Pre-history to present
6	Diversification Arts, Humanities & Literature (DA, DH, DL): 6 credits from two different areas
3	Diversification Social Sciences (DS): 6 credits from two different areas PSY 100
3	Diversification Social Sciences (DS): Different area from above.
3	Diversification Natural Sciences (DB, DP, DY): 3 credits from the biological sciences (DB): BIOL 171
3	3 credits from the physical sciences (DP): CHEM 161
1	1 credit of laboratory (DY): CHEM 161L

#### Natural Sciences Lower Division Core Requirements: 34 - 44 credits

\*Up to 10 credits in the Lower Division Requirement can also fulfill General Education Requirements

Credits	Course Alpha / Number / Title
3	ENG 200 Composition II (or equivalent) with a "C-" or higher
0-4*	CHEM 161/ 161 L General Chemistry I and Lab (can also satisfy general ed DP/DY above)  Prerequisite: Placement into ENG 100 or concurrent enrollment in ENG 100T and MATH 103 with a C or higher or concurrent enrollment in MATH 241
4	CHEM 162/ 162 L General Chemistry II and Lab Prerequisite: CHEM 161 with a C or higher
0-4*	MATH 241 Calculus I Prerequisite: Grade of "C" or better in MATH 140 or equivalent; or placement into MATH 241
4	MATH 242 Calculus II Prerequisite: Grade of "C" or better in MATH 241 or equivalent; or placement into MATH 242
4	PHYS 151/ 151L College Physics I and Lab or PHYS 170/ 170 L General Physics I and Lab Prerequisite: MATH 140 with a C or better, or Math 241 with a C or better or concurrent with Math 241
4	PHYS 152/ 152 L College Physics II and Lab or PHYS 272/ 272 L General Physics II and Lab Prerequisite: PHYS 151/151L with a C or better, or PHYS 170/170L with a C or better and Math 242 with a C or better or concurrent with Math 242
0-4*	BIOL 171/ 171L Introduction to Biology I and Lab (can also satisfy general ed DB above) Prerequisite: Completion of or concurrent enrollment in either CHEM 151 or 161
4	BIOL 172/ 172L Introduction to Biology II and Lab Prerequisite: BIOL 171/171L
3	ICS 101 Digital Tools for the Information World -OR-
	ICS 111 Introduction to Computer Science Prerequisite: ICS 101 or equivalent, all with a grade of C or better, or consent of instructor

## **Appendix D: Program Sheet for Health Sciences**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

3	Select one course from the following: HLTH 204 Introduction to Native Hawaiian & Indigenous Health and Healing (HAP) HLTH 205 Hawaiian Ways of Healing NS 2XX Interdisciplinary Indigenous Sciences and Health (HAP)
1	NS 1XX Transdisciplinary Introduction to Laboratory Methods (DY)
2	NS 2XX Transdisciplinary Introduction to Research Methods

#### Natural Sciences Upper Division Core Requirements: 7 credits

Credits	Course Alpha / Number / Title
4	MATH 304 Mathematical Modeling Prerequisite: Grade of "C" or better in Math 242
3	NS 4XX Interdisciplinary Seminar

#### Health Sciences Lower Division Concentration Requirement: 14-17 credits

Credits	Course Alpha / Number / Title
4	PHYL 141/141L Human Anatomy and Physiology I and Lab Prerequisite: Completion or current enrollment in ENG 100
4	PHYL 142/142L Human Anatomy and Physiology II and Lab Prerequisite: Grade of "C" in PHYL 141
3	HLTH 117 Survey of Health Professions
3	HLTH 123 Introduction to Clinical Skills and Patient Care (OC)
0-3	PSY 100 Survey of Psychology

#### Health Sciences Upper Division Concentration Requirements: 18 credits

Credits	Course Alpha / Number / Title
3	HLTH 395 Health and Wellness for Life (ETH)
3	HLTH 3XX Biostastics Prerequisite: MATH 135
3	Select one course from the following: BIOL 365 Research Methods in Biology (Prerequisite: BIOL 101 or BIOL 171) PUBA 308 Community Engaged Research Methods HLTH 309 Healthcare Statistics and Research Methodology
3	PUBA 477 Ethics in Healthcare Administration (ETH) <b>OR</b> BIOL 401 Ethics for Biology (ETH) Prerequisite: BIOL 101 or BIOL 171
3	PUBA 314 Community Epidemiology & Population Health
3	PUBA 338 Cultural Competence in Healthcare

#### **Health Sciences Concentration Electives: 15 credits**

BSNS Health Sciences who desire to apply to graduate or professional school for Health Professions should meet with a faculty advisor to determine the most appropriate electives. Some electives may have lower division prerequisites.

**ANTH 425 Medical Anthropology** 

ANTH 480 Land, Culture & Social Justice

**BIOL 3XX/3XX Advanced Human Phys & Lab** 

BIOL 3XX/3XX Advanced Anatomy
BIOL 384/384L Human Skeletal Biology

**BIOL 375/375L Genetics and Lab** 

BIOL 340 Genetics, Evolution, and Society BIOC 441/441L Biochemistry I and Lab

BIOL 275/275L Cell and Molecular Biology and Lab

PSY 371 Abnormal Psychology PSY 473 Psychology of Healing

PUBA 354 Program Planning & Evaluation in Health

PUBA 302 Health Policy, Politics, & Law

**PUBA 318 Managed Care** 

**PUBA 307 Community Health Analysis** 

PUBA 446 Contemporary Issues in Healthcare SCFS 340 Food Sovereignty, Nutrition & Human

Wellbeing: Reconnecting Food, Nature & Community

# **Appendix D: Program Sheet for Health Sciences**

UH West O'ahu Student Program Sheet for Academic Year 2019-20

HLTH 302 The One Health Approach to Infectious Disease
PHYL 354/354L Exercise Physiology & Lab

SOC 354 Survey of Medical Sociology SOC 412 Death, Dying, & Bereavement SOC 479 ASCP Research in Health

Credits	Course Alpha / Number / Title
3	
3	
3	
3	
3	

#### **Capstone Requirement: 6 credits**

Credits	Course Alpha / Number / Title
3	NS 486A Senior Project (WI)
3	NS 490A Senior Practicum (WI)

#### Elective Requirements: NO ELECTIVES NEEDED, Program has 120 credits

Credits	Course Alpha / Number / Title	
0		

Dr. Rebecca Romine (rromine@hawaii.edu) is the Faculty contact for this concentration.

## Appendix E: Academic Map for Applied Mathematics - Placement into MATH 241

University of Hawai'i West O'ahu – Academic Map 2019-2020 Bachelor of Science in Natural Science, Concentration in Applied Mathematics 120 credits

#### **Graduation Requirements**

- □ 45 Upper Division Credits Minimum
- □ 120 Total Credits Minimum □ 30 UHWO Credits Minimum
- □ 3 Upper Division Writing Intensive Courses
- □ 2.0 OVERALL GPA
- □ Focus Requirements (OC, HAP, ETH)
- 2.0 UHWO GPA □ 2.0 CONCENTRATION GPA

Year 1

**SEMESTER 1 SEMESTER 2** Fall Spring **REQ Fulfilled** COURSE CR COURSE CR **REQ Fulfilled** Written Comm (FW) ENG 100 3 Writing Skills **ENG 200** 3 4 NS LD Core & FQ MATH 241\*\* 4 NS LD Core **MATH 242** CHEM 162/162L 4 Social Sciences (DS) e.g., ANTH, ECON, POLS, PSY or 3 NS LD Core SOC Natural Sciences (DB or DP) **CHEM 161** 3 NS LD Core NS 2XX Intro to Research Methods 2 and NS LD Core DA/DH/DL Recommend: HWST 107 DH, HAP 3 Natural Sciences (DY) CHEM 161L 1 NS 1XX Transdisciplinary Intro to NS LD Core 1 Lab 15 Credits 16 Credits

\*\*Need ACCUPLACER to place into MATH 241 or MATH 140/140X is a pre requisite for MATH 241. MILESTONE: Completion of minimum Math Requirement.

MILESTONE: Complete ENG 200 before taking UD WI courses, HAP, ETH and OC Focus requirements

MATH 242 is pre-requisite for most UD Mathematics courses

Year 2

#### **SEMESTER 4 SEMESTER 3**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
FGA/FGB/FGC		3	FGA/FGB/FGC		3
NS LD Core	ICS 101 or ICS 111*	3	NS LD Core	BIOL 172/172L	4
Natural Sciences (DB or DP)/NS LD	BIOL 171/171L	4	DA/DH/DL		3
MATH LD Conc	MATH 245** (fall only)	4	Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3
			NS LD Core	HLTH 204, HLTH 205 OR NS 2XX	3
Credits		14	Credits		16

\*Recommend ICS 111 for MATH 304 and is a pre-requisite for MATH 407

\*\*MATH 245 can be replaced by MATH 243 and MATH 244

MILESTONE: Complete Math LD Concentration. MATH 245 and MATH 321 are the pre-requisites for MATH 351

MILESTONE: Complete Gen Ed requirements

Year 3

#### SEMESTER 5 **SEMESTER 6**

Fall			Spring		ALCOHOLD TO BE
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
NS LD Core	PHYS 151/171L	4	NS LD Core	PHYS 152/272L	4
MATH UD Conc	MATH 361* (fall only)	3	NS UD Core WI	MATH 304 (sp only)	4
MATH UD Corc	MATH 4XX (Method Applied Math) (fall only)	3	MATH UD Conc	MATH 307 (sp only)	3
MATH UD Conc WI	MATH 321 (fall only)	3	MATH UD Conc	MATH 461 (sp only)	3
MATH Electives		3			
Credits		16	Credits		14
MILESTONE: Schedule	appointment with Academic Advisor to rev	iew	MILESTONE: Complete N	IS LD Core -	

degree requirements.

MATH 307 is a pre requisite for MATH 407, MATH 411 and MATH 412 Talk to Faculty Advisor regarding Senior Practicum or Project

Year 4

#### **SEMESTER 8**

SEMESTER 7			SEMESTER 8		
Fall			Spring	THE RESERVE OF THE PARTY OF THE PARTY.	
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Capstone WI	NS 486A or NS 490A	3	NS UD Core OC	NS 4XX (Interdisciplinary Seminar)	3
MATH UD Conc ETH/OC	MATH 327	3	MATH UD Conc	MATH 331 (sp only)	3
MATH UD Core	MATH 405 (fall only, even year)	3	MATH Electives		3
Other Electives		3	MATH Electives		3
Other Electives		3	Other Electives		2
Credits		15	Credits		14

# Appendix E: Academic Map for Applied Mathematics — Placement into MATH 241 MILESTONE: Complete ETH, OC, 3 UD WI Course, NS Capstone and MATH Apply for graduation before Add/Drop deadline.

Concentration Electives. See Academic Advisor for Final Degree Audit and

MILESTONE: Complete NS UD Core, MATH UD concentration, and NS electives.

to review Application for Graduation.

NOTE: Please review the UHWO Catalog and the Advising Sheet for compliance with the recommended completions.

# **Appendix F: Academic Map for Life Sciences**

University of Hawai'i West O'ahu - Academic Map 2019-2020 Bachelor of Science in Natural Science, Concentration in Life Sciences 126-130 credits

#### **Graduation Requirements**

- ☐ 45 Upper Division Credits Minimum
- □ 120 Total Credits Minimum ☐ Focus Requirements (OC, HAP, ETH)
- a 30 UHWO Credits Minimum
- ☐ 3 Upper Division Writing Intensive Courses
- □ 2.0 OVERALL GPA
- □ 2.0 UHWO GPA
- **2.0 CONCENTRATION GPA**

#### Year 1 SUMMER 1

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SEMESTER 1 **SEMESTER 2** 

JEIVIESTER I					
Fall			Spring	THE REPORT OF THE PARTY OF THE	
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Written Comm (FW)	ENG 100	3	Writing Skills	ENG 200	3
FQ	MATH 241**	4	FGA or FGB	HIST 151/152	3
FGA or FGB	HIST 151/152, or ANTH 151/152	3	Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3
Natural Sciences (DB or DP)/NS LD	CHEM 161	3	NS LD Core	MATH 242	4
Natural Sciences (DY)	CHEM 161L Lab	1	NS LD Core	CHEM 162/162L	4
NS LD	NS 2XX (Intro to Research)	2			
Credits		16	Credits		17
**Need ACCUPLACER to place into MATH 241 or MATH 140/140X is a			MILESTONE: Complete E	NG 200 before taking UD WI courses	
STATE OF THE PARTIES OF			AAATH ZAZ		

prerequisite for MATH 241.

MILESTONE: Completion of minimum Math Requirement.

MATH 242 is prerequisite for most UD Mathematics courses

Year 2

SEMESTER 3	SEMESTER 4

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3	DA/DH/DL		3
NS LD Core	ICS 101 or ICS 111*	3	NS LD Core	BIOL 172/172L (spring only)	4
Natural Sciences (DB or DP)/NS LD	BIOL 171/171L (fall only)	3-4	NS LD Core	HLTH 204 or HLTH 205	3
LS LD Conc	CHEM 272/272L (fall only)	4	LS LD Conc	CHEM 273/273L (spring only)	4
LS Conc Elec		3	LS UD Concentration	BIOL 310	3
Credits		16-17	Credits		17
*Recommend ICS 111 for	*Recommend ICS 111 for MATH 304 and is a prerequisite for MATH 407.			P Focus Requirement.	

\*\*MATH 245 is not in the catalog, but approved by CC. This can also be replaced by MATH 243 and MATH 244

MILESTONE: Complete Math LD Concentration.. MATH 245 and MATH 321 are the prerequisites for MATH 351.

MATH 307 is a prerequisite for MATH 407, MATH 411, and MATH 412.

Year 3

**SEMESTER 6** SEMESTER 5

Fall REQ Fu filled CO DA/DH/DL	DURSE	CR	Spring		THE R
THE CONTRACT	DURSE	CR	000 5.4631-4		
DA/DH/DL		CIT	REQ Fulfilled	COURSE	CF
		3	NS LD Core	PHYS 272/272L	4
NS LD Core P	HYS 170/170L	4	NS UD Core	MATH 304 (spring only)	3
LS UD Core B	IOL 365 (fall only)	3	LS LD Conc	BIOL 275/275L (Spring only)	4
LS LD Conc Bi	OL 265/265L (fall only)	4	LS UD Conc	BIOL 390	3
LS Conc Elective		3			
Credits		17	Credits		14

Year 4

SEMESTER 7		SEMESTER 8			
Fall			Spr ing		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
LS UD Conc	BIOL 375/375 Lab (fall only)	4	Capstone WI	NS 491	3
LS UD Conc	BIOL 401	3	Capstone	NS 4XX Seminar	1

**Appendix F: Academic Map for Life Sciences** 

LS UD Core	BIOC 441/441L	4	LS Con Electives	3
LS Con Electives		3	LS Con Electives	3
			LS Con Electives	3
Credits		14	Credits	13
Talk to Faculty A	nplete ETH, NS UD Core, MATH Conce dvisor regarding Senior Practicum or or for Final Degree Audit and to review	Project. See	Apply for graduation before Add/Drop dead MILESTONE: Complete 3 UD WI Courses, Concentration, and NS electives.	

NOTE: Please review the UHWO Catalog and the Advising Sheet for compliance with the recommended completions.

# Appendix G: Academic Map for Health Sciences

#### University of Hawai'i West O'ahu — Academic Map 2019-2020 Bachelor of Science in Natural Science, Concentration in Health Sciences 125-138 credits

#### **Graduation Requirements**

- ☐ 45 Upper Division Credits Minimum
- □ 120 Total Credits Minimum
- 30 UHWO Credits Minimum
- □ 3 Upper Division Writing Intensive Courses
- □ Focus Requirements (OC, HAP, ETH)
- □ 2.0 OVERALL GPA
- □ 2.0 UHWO GPA
- **2.0 CONCENTRATION GPA**

#### Year 1 SUMMER 1

Fall		
REQ Fulfilled	COURSE	CR
NS LD Core	NS 1XX Lab	1
Credits		1

#### SEMESTER 1

#### SEMESTER 2

DEIAIED LEW T			SEIVIESTEILE		
Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Written Comm (FW)	ENG 100	3	Writing Skills	ENG 200	3
FQ	MATH 241**	4	HS LD Conc	HLTH 123	3
HS LD Conc	HLTH 117	3	Social Sciences (DS)	PSY 100 recommended	3
Natural Sciences (DB or DP)/NS LD	CHEM 161	3	NS LD Core	MATH 242	4
Natural Sciences (DY)	CHEM 161L Lab	1	NS LD Core	CHEM 162/162L	4
NS LD	NS 2XX (Intro to Research)	2			
Credits		16	Credits		17
**Need ACCUPLACER to p	lace into MATH 241 or MATH 140/1	40X is a	MILESTONE: Complete El	NG 200 before taking UD WI courses.	
prerequisite for MATH 24:	1 🔅		Completion of minimum	Math Requirement.	

#### Year 2 SEMESTER 3

#### **SEMESTER 4**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3	HS UD Core	BIOL 310 or HLTH 3XX	3
FGA or FGB	HIST 151/152	3	FGA or FGB	HIST 151/152	3
NS LD Core	ICS 101 or ICS 111*	3	NS LD Core	BIOL 172/172L (spring only)	4
Natural Sciences (DB or DP)/NS LD	BIOL 171/171L (fall only)	3-4	NS LD Core	HLTH 204 or HLTH 205	3
NS LD Core	PHYS 151/151L or PHYS 170/170L	4	NS LD Core	PHYS 152/152L or HYS 272/272L	4
Credits		16-17	Credits		17
*Recommend ICS 111 for I with Faculty Advisor to rev	MATH 304 MILESTONE: Schedule appoir	ntment	MILESTONE: Complet	te HAP Focus Requirement Complete NS LD Core	2

# Year 3 SEMESTER 5

#### SEMESTER

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
DA/DH/DL		3	HS LD Core	PHYL 142/142L	4
HS LD Core	PHYL 141/141L	4	NS UD Core	MATH 304 (spring only)	4
HS UD Core	HLTH 395 (fall only)	3	DA/DH/DL		3
HS UD Conc	PUBA 314	3	HS Conc Elective		3
HS UD Conc	BIOL 365 or PUBA 308	3	HS UD Conc	PUBA 338	3
Credits		16	Credits		17
MILESTONE: Schedule	appointment with Academic Advisor to	review	MILESTONE: Complete H	IS LD Core. Complete Gen Ed requiremen	ts -
degree requirements.					

#### Year 4

#### SEMESTER 7

#### SEMESTER 8

JEIVIEJ IEN /	The state of the s		DEIVIEDTEILO		
Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Capstone	NS 490A Senior Practicum	3	Capstone WI	NS 486 Senior Project	3
HS UD Conc	BIOL 401	3	Capstone	NS 4XX Seminar	3
HS Conc Electives		3-4	HS Conc Electives		3-4
HS Conc Electives		3-4	HS Conc Electives		3-4
Credits		12-14	Credits		12-14

# **Appendix G: Academic Map for Health Sciences**

MILESTONE: Complete ETH, NS UD and HS UD Conc Electives. Talk to Faculty Advisor regarding Senior Practicum or Project. See Academic Advisor for Final Degree Audit and to review Application for Graduation.

Apply for graduation before Add/Drop deadline.

MILESTONE: Complete 3 UD WI Courses, OC, NS Capstone, and HS electives.

NOTE: Please review the UHWO Catalog and the Advising Sheet for compliance with the recommended completions.

# Appendix H: Academic Map for Applied Mathematics - Placement Below MATH 241

University of Hawai'i West O'ahu – Academic Map 2019-2020

Bachelor of Science in Natural Science, Concentration in Applied Mathematics

120 credits

Grad	luati	ion F	(egu	irem	ents

- □ 45 Upper Division Credits Minimum
- □ 120 Total Credits Minimum □ 30 UHWO Credits Minimum
- 3 Upper Division Writing Intensive Courses
   Focus Requirements (OC, HAP, ETH)
- 2.0 OVERALL GPA
- □ 2.0 UHWO GPA
- □ 2.0 CONCENTRATION GPA

#### Year 1

SEMESTER 1			SEMESTER 2			
Fall			Spring			
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR	
Written Comm (FW)	ENG 100	3	Writing Skills	ENG 200	3	
Other Elective PQ	MATH 135/103	B	Other Elective	MATH 140/140X	B/4	
Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3	NS LD Core	CHEM 162/162L	4	
Natural Sciences (DB or DP) and NS LD Core	CHEM 161	3	NS LD Core	NS 2XX Intro to Research Methods	2	
Natural Sciences (DY)	CHEM 161L	1				
NS LD Core	NS 1XX Transdisciplinary Intro to Lab	1				
Credits		14	Credits		12/1	
**Need ACCUPLACER to place a prerequisite for MATH 140. MILESTONE: Completion of m	e into MATH 103 or MATH 135. MATH	135 is	requirements.	e ENG 200 before taking UD WI courses. ETH an isite for most UD Mathematics courses.	d OC Focu	

#### Year 2

SEMESTER 3

#### **SEMESTER 4**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
FGA/FGB/FGC		3	FGA/FGB/FGC		3
NS LD Core	ICS 101 or ICS 111*	3	NS LD Core	BIOL 172/172L	4
Natural Sciences (DB or DP)/NS LD	BIOL 171/171L	4	NS LD Core	MATH 242	2
NS LD Core FQ	MATH 241**	8	DA/DH/DL		3
Credits		14	Credits		14
*Recommend ICS 111 for N	MATH 304 and is a pre-requisite	for MATH 407.	MILESTONE:		

#### Year 3

SEMESTER 5

#### **SEMESTER 6**

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
DA/DH/DL	Recommend: HWST 107 DH, HAP	3	Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3
NS LD Core	PHYS 151/272L	4	NS LD Core	PHYS 152/272L	4
MATH LD Con c	MATH245** (fallonly)	4	NS UD Core & W	MATH 304 (sp only)	1
MATH UD Conc	MATH 361* (fall only, odd year)	3	MA THUD Concentration	MATH 307 (sp only)	
MATH UD Conc WI	MATH 321 (fall only)	3	MATH UD Conc	MATH 461* (sp only, even year)	3
Credits		17	Credits		17
MILESTONE: Complete	HAP Focus Requirement. Schedule appoi	intment	MILESTONE: Complete NS LE	Core and Gen Ed requirements.	
with Academic Advisor	to review degree requirements.		*MATH 441 is replacing MAT	TH 471	
*MATH 341 is replacing MATH 371			MATH 307 is a pre-requisite for MATH 407, MATH 411, and MATH 412.		
**MATH 245 can be re	placed by MATH 243 and MATH 244		Talk to Faculty Advisor regarding Senior Practicum or Project.		

#### Year 4

SEMESTER 7

MATH 245 and MATH 321 are the pre-requisites for MATH 351

SE	M	ES1	ER	8

LIVIES I LIV /					A Company of the Comp
Fall	THE RESIDENCE OF THE PARTY OF T		Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Capstone WI	NS 486A or NS 490A	3	NS UD Core OC	NS 4XX (Interdisciplinary Seminar)	3
MATH UD Conc ETH/OC	MATH 327	3	MATH UD Conc	MATH 331 (sp only, odd year)	3
Math UD Core	MATH 405 (fall only, even year)	3	MATI H Bective		
MATTH UD Core	MATH 4XX M ethod Applied Math) fall only	B	MATH Electives		3
NS ID Core	H. TH 204, H. TH 205 OR N 52 XX	13	MATH Electives		3

# Appendix H: Academic Map for Applied Mathematics – Placement Below MATH 241

				C-100 (0) (0) (0) (0) (0) (0) (0) (0) (0) (	
Credits		15	Credits		15
MILESTONE: Complete ETH, OC, 3 UD WI Course, NS Capstone and MATH		Apply for graduation before Add/Drop deadline.			
Concentration Electives	s. See Academic Advisor for Final Degree Aud	it and	MILESTONE: Complete NS UD Co	re, MATH UD concentration, and NS electi	ives.
to review Application for	or Graduation.				

NOTE: Please review the UHWO Catalog and the Advising Sheet for compliance with the recommended completions.

### Appendix I: Academic Map for Applied Mathematics - Transition from UHCC ASNS

University of Hawai'i West O'ahu - Academic Map 2019-2020 Bachelor of Science in Natural Science, Concentration in Applied Mathematics 120 credits

Graduation Requirements
-------------------------

- □ 45 Upper Division Credits Minimum
- ☐ 120 Total Credits Minimum □ 30 UHWO Credits Minimum
- □ 3 Upper Division Writing Intensive Courses □ Focus Requirements (OC, HAP, ETH)
- 2.0 OVERALL GPA
- □ 2.0 UHWO GPA
- ☐ 2.0 CONCENTRATION GPA

#### Year 1

SEMESTER 1		SEMESTER 2			
Fall			Spring	Paradia de la companya de la company	
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Written Comm (FW)	ENG 100	3	NS LD Core	PHYS 152/272L	4
Other Elective			Other Elective		5
Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY-or SOC	3	NS LD Core	CHEM 162/162L	4
Natural Sciences (DB or DP) and NS LD Core	CHEM 161	3			
Natural Sciences (DY)	CHEM 161L	1	DA/DH/DL	Recommend: HWST 107 DH, HAP	3
			- NS LD Core	-PHYS 151/171L	-4
Credits		10	Credits		20
-					

#### Year 2

Fall			Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
FGA/FGB/FGC		3	FGA/FGB/FGC		3
NS LD Core	ICS 101 or ICS 111*	3	NS LD Core	BIOL 172/172L	4
Natural Sciences (DB or DP)/NS LD	BIOL 171/171L	4	NS LD Core	MATH 242	4
NS LD Core FQ	MATH 241**	4			
Credits		14	Credits		11

#### Year 3 **SEMESTER 5**

Fall	Street, and the state of the st		Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR
Writing Skills	ENG 200	3	Social Sciences (DS)	e.g., ANTH, ECON, POLS, PSY or SOC	3
NS LD Core	NS 1XX Transdisciplinary Intro to Lab	1	NS LD Core	NS 2XX Intro to Research Methods	2
MATH LD Conc	MATH 245* (fall only)	4	NS UD Core & WI	MATH 304 (sp only)	4
MATH UD Conc	MATH 361**(fall only, odd year)	3	MATH UD Concentration	MATH 307 (sp only)	3
MATH UD Conc WI	MATH 321*** (fail only)	3	MATH UD Conc	MATH 461* (sp only, even year)	3
MATH UD Corc	MATH 4XX (Method Applied Math) (fall only)	3			
Credits		17	Credits		15

SEMESTER 6

MILESTONE: Complete HAP Focus Requirement. Schedule appointment with Academic Advisor to review degree requirements.

- \*MATH 245 can also be replaced by MATH 243 and MATH 244 (ASNS in Engineering had these courses)
- \*\*MATH 341 is replacing MATH 371
- \*\*\* ENG 200 requirement needs to be replaced with concurrent.

- \*MATH 441 is replacing MATH 471
- Talk to Faculty Advisor regarding Senior Practicum or Project.

#### Year 4

SEIVIESTER /			SEIVIESTER 8		
Fall		1111	Spring		
REQ Fulfilled	COURSE	CR	REQ Fulfilled	COURSE	CR.
Capstone WI	NS 486A or NS 490A	3	NS UD Core OC	NS 4XX (Interdisciplinary Seminar)	3
MATH UD Conc ETH/OC	MATH 327	3	MATH UD Conc	MATH 331 (sp only, odd year)	3
Math UD Core	MATH 405 (fall only, even year)	3	MATH Electives		3
MATH UD Corc	MATH 4XX (Method Applied Math) (fall only)	3	MATH Electives		3

# Appendix I: Academic Map for Applied Mathematics – Transition from UHCC ASNS

NS LD Core	HLTH 204, HLTH 205 OR NS 2XX	3	MATH Electives	3
DA/DH/DL		3		
Credits		18	Credits	15
MILESTONE: Complete ETH, OC, 3 UD WI Course, Gen Ed requirements,		Apply for graduation before Add/Drop deadline.		
NS LD Core, NS Capstone and MATH Concentration Electives. See		MILESTONE: Complete NS UD Core, MATH UD concentra	tion, and NS electives.	
Academic Advisor for Final Degree Audit and to review Application for				
Graduation.				

NOTE: Please review the UHWO Catalog and the Advising Sheet for compliance with the recommended completions.

#### Appendix J: Letter of Support from UH Mānoa Mathematics Department



Wayne Smith, Chair Department of Mathematics Honolulu, HI 96822–2273

chair@math.hawaii.edu Fax: [808] 956-9139 Voice: [808] 956-8792

October 12, 2018

To Whom it May Concern:

I am writing to you in support of the application of the University of Hawai'i, West Oahu, for the Bachelor of Science in Natural Sciences, Concentration in Applied Mathematics.

Faculty in the Department of Mathematics of the University of Hawai'i at Mānoa have consulted with the faculty of UHWO regarding their request and discussed with them in some detail how their proposed degree programs would interact with our own. On our campus, while we offer training in a broad spectrum of mathematical disciplines including applied disciplines, we do not offer undergraduate degrees in applied mathematics. However, our graduate program was recently revised to incorporate applied mathematics as a core discipline, and the proposed undergraduate degree at UHWO would create a coherent continuum within the UH system for applied mathematics. Further, this proposed degree aligns well with recent appointments made in the Departments of Mathematics at both UHWO and UHM.

Applied mathematicians are in high demand by many different types of organizations and industries, and indeed, mathematics and computational science are utilized in nearly all fields of human endeavor. It is natural for the colleges within the UH system to expand their existing degrees in response to the evolving job market.

In summary, we look forward to continuing work with our counterparts at UHWO on the design and implementation of this degree program in applied mathematics which complements our own programs. And we expect this cooperation will lead to richer opportunities for undergraduate students on both campuses.

Sincerely yours,

Wayne Smith

Professor and Chair

Wagne Snoth

#### Appendix K: Letter of Support from UH Hilo Mathematics Department



October 16, 2018

Dr. Efren Ruiz

Phone: (808) 932-7538 Email: ruize@hawaii.edu

Re: Proposal for BS in Natural Sciences with a concentration in Applied Mathematics

Dear committee members,

The Mathematics faculty at the University of Hawai'i at Hilo discussed the UHWO Mathematics faculty's proposal for the creation of a BS in Natural Science with a concentration in Applied Mathematics and found no major conflicts with our established programs. Offering a degree in Natural Sciences with a concentration in Applied Mathematics will complement the currently established MATH degree program offered at UHH that concentrate on a traditional degree in mathematics (for those interested in an advanced degree) or one tailored for secondary teachers. Applied mathematics differs from traditional (Pure) mathematics as it focuses on mathematical methods that are used in sciences, industry, and business. Having a degree in Applied Mathematics would benefit the UH system.

If you have further questions, please do not hesitate to contact me at ruize@hawaii.edu or call me at (808) 932-7538.

Sincerely,

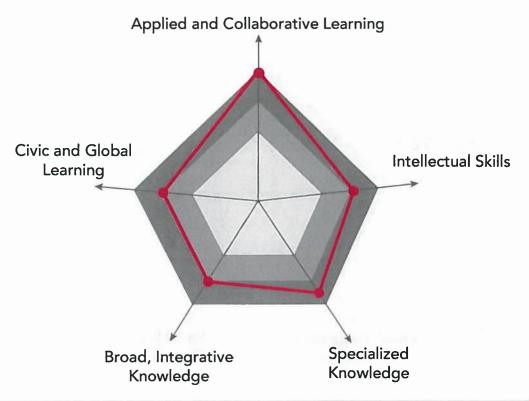
Efren Ruiz, Ph.D.

Mathematics

200 W. KAWILI STREET HILO, HAWAI'I 96720-4091

# **HEALTH SCIENCES**





#### Bachelor of Science in Natural Science with a Concentration in Health Sciences

**CLO1:** Explain the basic foundations of biological, social, and behavioral sciences as they apply to the principles of health science.

**CLO2:** Identify and evaluate ethical, cultural, socio-economic, behavioral, biological, and environmental factors that impact human health, contribute to health disparities, and provide opportunities for promoting and protecting health across the life course.

**CLO3:** Synthesize, integrate, and analyze research in health science literature.

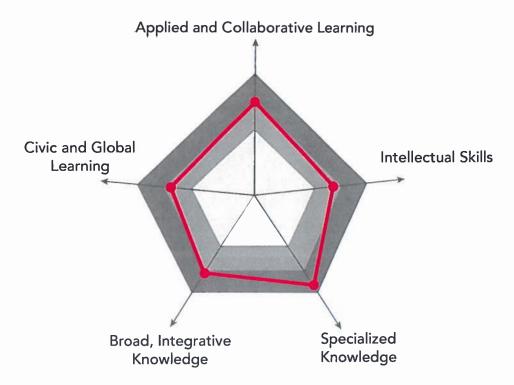
CLO4: Formally communicate scientific information in oral, written, and electronic formats

**CLO5:** Demonstrate knowledge of Native Hawaiian culture and the physical and natural world as it relates to individual and population health.

**CLO6:** Articulate and exhibit appropriate professional skills and ethical behaviors needed for successful careers in the health science field.

# **LIFE SCIENCES**





### Bachelor of Science in Natural Science with a Concentration in Life Sciences

CLO1:To communicate biological content and research effectively using various media.

**CLO2**: To integrate math, physical sciences and/or technology to answer biological questions using the scientific method to formulate testable scientific hypotheses and obtain data to test those hypotheses.

**CLO3:** To demonstrate proficiency of lab and field techniques in their area of specialization using biological tools and content knowledge to perform basic laboratory skills pertaining to assessments, laboratory methods, sound experimental and analytical practices, data acquisition and reporting.

**CLO4:** To demonstrate the ability to solve biological problems using effective interpretation and analysis of relationships among living things from the molecular to ecosystem level applying basic concepts grounded in the foundational theories from the life sciences.

# University of Hawai'i Academic Program Actions Report, 2017-2018

#### Introduction

As required by Regents Policy 5.201, each year the University of Hawai'i (UH) provides the Board of Regents with a summary of program actions completed the prior academic year. This report includes information on all stages of program development from the beginning stages through program review and potentially termination. As a system, UH monitors program innovation and quality to ensure that we meet state workforce needs, the needs of our students, and keep pace with technological, economic, and cultural shifts.

The campuses in the UH System are the dominant degree granting entities within the State of Hawai'i. As such, we offer a wide range of programs across our ten campuses, the master list is updated each year and can be found on our Institutional Research Office website (http://www.Hawai'i.edu/iro/maps/Cuuhf17.pdf).

Campus	Programs Offered
University of Hawai'i at Mānoa	136 (BA, MA, & Ph.D.)
University of Hawai'i, West O'ahu	6 (BA)
University of Hawai'i, Hilo	47 (BA, MA& Ph.D.)
Hawai'i Community College	27 (AA, AS, AAS, CA)
Honolulu Community College	26 (AA, AS, AAS, CA)
Kapi'olani Community College	25 (AA, AS, AAS, CA, ATS, APC)
Kaua'i Community College	22 (AA, AS, AAS, CA, ATS)
Leeward Community College	16 (AA, AS, AAS, CA, APC)
University of Hawai'i, Maui College	24 (BAS, AAS, AA, AS, CA)
Windward Community College	5 (AA, AS, CA)
Total:	334

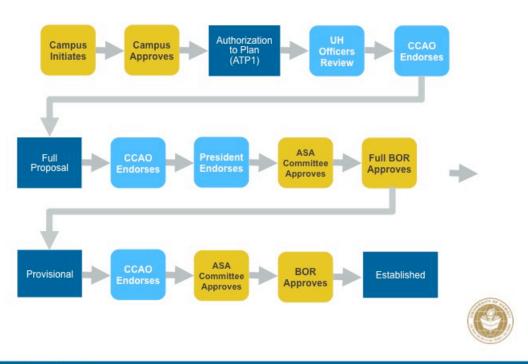
Figure 1: Snapshot of Programs offered across the UH System

This report covers new programs created, provisional programs and their transition to established status, program termination and stop-outs, program review, and programs with a small number of graduates.

# New Programs, Degrees, Certificates, Minors, Concentrations and new Authorizations to Plan New Programs

The program cycle from the initial authorization to plan through the creation of an established program is outlined in Figure 2.

# **Current Program Proposal Process**



OVPAPP 5/2018 UPDATED 2/19

Figure 2: Program Proposal Process

During the Authorization to Plan phase, but prior to approval as a provisional program, each new program must provide an analysis of how it meets state needs and fits within the Integrated Academic and Facilities Plan (IAFP) for the campus. While new programing is generally a bottom up effort on the part of content experts, how the program fits within the larger strategic direction of the campus must be clear before approval to plan is provided. Chancellors may approve new certificates, minors, and concentrations on their campuses, but Degrees and some Certificates of Achievement must be approved by the Board of Regents.

The only new program approved during 2017-18 was the Master of Landscape Architecture at UH Mānoa, designed to fill the dearth identified in the field for professionals in Hawai'i.

As the number of certificates and concentrations suggest, campuses are focusing on flexible avenues to meet the needs of the workforce and address the interests of students in credentials beyond the major. Such an approach provides the future possibility of stackable credentials that can create new ways of building out flexible and adaptable majors. These new minors, certificates and concentrations include a Graduate Certificate in Ethnomathematics at UH Mānoa, designed to integrate the study of math with indigenous knowledge; a certificate in Data Science at UH Hilo, to tap into the fast emerging field of big data; a new concentration in Community Health at UH West Oʻahu to help provide students with avenues towards applying their public administration BA in

fields attuned with community needs. Additional details of new programs can be found in Appendix A:I. In Academic Year 2017-2018, the following program actions were approved:

New Programs Approved by the BOR	1
New Authorization to Plan	6
New Certificates, Minors, and	14
Concentrations	

Figure 3: Approved Program Actions

#### **Provisional Program and Certificate Actions**

We are treating provisional program actions in two groups. First, we will discuss provisional programs moving to established status. Second, we will discuss provisional program terminations and stop-outs. Additional details about each of these categories can be found in Appendix A.

Approval by the Board of Regents authorizes provisional offerings of degree programs. Provisional program status is granted to a program that allows it the time needed to build a constituent base by advertising and recruiting students, as well as implement any new courses and the proposed curriculum plan. The program actions report tracks the transition of provisional programs to established status and ensures we are moving programs through the process efficiently, while giving programs the necessary time to be successful. A backlog of provisional programs transitioning to established status has led the Office of the Vice President for Academic Planning and Policy (OVPAPP) to monitor the process closely. Throughout the next year we will continue to work through this backlog as campuses continue to bring forward programs for approval to established status.

Formal permission from the President is required to receive an extension beyond the initial provisional term. There must be a clear justification for such an extension. In Academic Year 2016-2017, there were nine programs moved from provisional to established status and two programs granted an extension. In 2017-2018, six programs transitioned from provisional to established status and the President approved six extensions.

- A. Provisional Programs Granted Established Status by the Board of Regents:
  - 1. Doctor of Philosophy in Public Health, UH Mānoa, BOR approved, 10/19/17
  - 2. Doctor of Nursing Practice, UH Mānoa, BOR approved, 5/18/18
  - 3. Doctor of Nursing Practice, UH Hilo, BOR approved, 5/18/18
  - 4. CA in Medical Assisting, Kaua'i CC, BOR approved, 5/18/18
  - 5. AS in Health Information Technology, Leeward CC, BOR approved 5/18/18
  - 6. BAS in Engineering Technology, UH Maui College, BOR approved 5/18/18
- B. Extension of Provisional Programs Status approved by the President:
  - 1. BA in Pacific Island Studies, UH Mānoa, President approved, 5/10/18
  - 2. BS in Molecular Cell Biology, UH Mānoa, President approved, 5/10/18
  - 3. BA in Pharmacy Studies, UH Hilo, President approved, 6/28/18
  - 4. PhD in Pharmaceutical Science, UH Hilo, President approved, 5/10/18
  - 5. MA in Heritage Management, UH Hilo, President approved, 9/17/2018
  - 6. APC in Culinary Management, Kapi'olani CC, President approved, 1/6/17

Figure 4: Provisional Programs

Most significant during this past academic year was the transition of the Doctor of Nursing Practice at both Mānoa and Hilo to established status. These programs serve multiple state needs for both rural and urban practitioners and are an example of collaborative programing across several UH campuses. The details of programs moving from provisional to established, as well as the programs currently in provisional status and their anticipated conversion dates, can be found in Appendix A:2.

#### **Program Terminations and Stop-Out of Admissions**

No degree program approved by the Board was terminated in 2017-2018, but two did have their names changed. However, eight certificate or concentration programs were terminated

A program may be stopped out so that faculty can reconfigure the curriculum with the intent of bringing a newly designed curriculum back online. Programs may be stopped out and terminated if the student demand is so low that resources are needed elsewhere. In 2017-18, there were two admissions stop-outs. The details can be found in Appendix A:III.

#### **Program Review**

This section of the report provides a summary of the comprehensive reviews completed during the 2017-2018 academic year of established programs at the UH Mānoa, UH Hilo, UH West Oʻahu, and UH Community Colleges in fulfillment of BOR policy. Reviews

conducted in other areas, such as student services, research, etc., are handled separately. The general process, with variations by campus, is outlined in Figure 3.



Figure 5 General Program Review Cycle

Once established, all academic programs must undergo periodic program review. The overall purpose of program review is to assess the extent to which academic programs are meeting their stated objectives and whether these objectives are still appropriate to the campus and University missions. The review process differs campus to campus but generally follows a similar trajectory. For the four-year campuses, a review must be completed at least every seven years, but it is common practice to engage in a five-year review cycle. This process brings in external reviewers, then based upon their report the program and campus administration engage in a dialogue about how best to implement recommendations emerging from the review. Finally, the review process includes periodic check-ins between each five-year review, followed by the next external review.

Community Colleges engage in an Annual Report of Program Data (ARPD) process. Every five years, the ARPD process builds to a 5-year program review that allows each campus to evaluate larger trends and challenges. Each campus has developed its own program review procedures appropriate to its programs and organization. All campuses engage in program review and use the results to inform program changes, identify emerging issues within disciplinary areas, and to develop new certificates or concentrations. Information related to program reviews and brief executive summaries can be found in Appendix B.

#### **Programs with Small Numbers of Graduates**

EP 5.229 calls for UH to report annually on the programs with a small number of graduates. In 2017-2018, we can report positive enrollment gains in some programs in this category in 2016-17, although they remain on the list. For Mānoa, these programs include the BA in Physics, the MA in Travel Industry Management, and the Ph.D. in Physics. For both Hawai'i Community College and Leeward Community College, Hawaiian Studies has seen positive graduation gains. Accounting and Construction Technology has also seen positive gains at Hawai'i Community College and Maui College.

It is important to highlight that many programs on the list of programs with small numbers of graduates serve important state needs. Many of these programs contribute to state efforts to graduate more students in STEM-related fields and thus remain essential to providing quality access to education for Hawai'i citizens even though the degree

program graduation numbers are small. Some programs with small numbers of graduates deliver courses important for general education and thus serve the campus in ways beyond graduating majors.

UH System is working to integrate the report regarding small numbers of graduates into the larger academic master planning process. This year, each campus was asked to recommend actions regarding these programs based upon four possible justifications using the template in Figure 5. Responses were collected and can be found in Appendix C.

Small Program	Review	Actions Taken	Recommendation
(Example Program) Mānoa: Molecular Biosciences & Biotech	The program provides 45% of the upper division courses in the Biology program and addresses employment demand in biotechnology. Since 2013, the program has doubled majors and tripled the degrees awarded.	With the redesigned website, Facebook presence, and increased outreach to advisors, high school counselors, and the Biology program, we anticipate further enrollment increases.	Options (choose one): 1. Continuation of program 2. Require program to grow to meet criteria by next review, 3. Merge with another program, 4. Stop-out or terminate

Figure 5: Programs with Small Number of Graduate Template

In the future, we will align the report on programs with small numbers of graduates with the program review cycle for each campus. The full details, program review, and analysis can be found in Appendix C. Figure 6 summarizes the recommendations campuses made regarding their programs that fit these criteria.

Recommendation	Campus	Number
1. Continuation of program	Mānoa	38
	Hilo	15
	Hawai'i Community College	22
	Honolulu Community College	8
	Kapi'olani Community College	7
	Kaua'i Community College	9
	Leeward Community College	4
	Maui College	6
2. Require to grow	Honolulu Community College	1
3. Merge with another program	Kaua'i Community College	2
	Leeward Community College	1
4. Stop-out or terminate	Kaua'i Community College	1
	Maui	1 (plus one TBD)

Figure 6: Recommendation for Programs with a Small Number of Graduates

### **Future Directions for the Academic Program Actions Report**

The components of the Academic Program Actions Report will be incorporated next year into the Academic Master Plan for the UH System, which is currently under development. This plan will report the established and provisional programs for each unit (3, 4-year campuses plus the UHCC system) and indicate changes made or projected over a 6-year period. The plan will also describe facilities and resource needs over the six years of the plan. It will contain a statement of the unit mission, its academic values and priorities and academic goals for the period, in a manner similar to what is currently presented in the 6-Year Facilities Plan. Both plans will be updated annually. Integrated together and with the annual operating budget and the unit enrollment plans, they will constitute a comprehensive extension of the Integrated Academic and Facilities Plan and will articulate the direction UH is taking over multiple years.

# UNIVERSITY OF HAWAI'I ACADEMIC PROGRAM ACTIONS REPORT, 2017-2018 Appendix A

### I. New Program and Certificate Actions

- A. New Academic Programs Approved by the Board of Regents:
  - 1. Master of Landscape Architecture, UH Mānoa, BOR approved 10/19/17
- B. New Authorization to Plan:
  - 1. UCert in Earth and Planetary Exploration Technology, UH Mānoa, Chancellor approved, Chancellor approved, 12/5/17
  - 2. UCert in Geospatial Information Science, UH Mānoa, Chancellor approved, 4/18/18
  - 3. BA in Public Policy, UH Mānoa, Chancellor approved, 3/8/18
  - 4. BS in Construction Engineering, UH Mānoa, Chancellor approved, 12/6/17
  - 5. AS in Entrepreneurship, Kapi'olani CC, Chancellor approved, 1/22/18
  - 6. AAS in Building Construction Technologies, Trades Technology Division, Kaua'i CC, Chancellor approved 3/22/18
- C. New Certificates, Minors, Concentrations Approved by Campus Administration
  - 1. Advanced Professional Certificate in Expanded Function Dental Hygiene in Pediatrics, UH Mānoa, Chancellor approved, 3/6/18
  - 2. GCert in Ethnomathematics, UH Mānoa, Chancellor approved, 12/1/17
  - 3. Minor in Performing Arts, College of Arts and Sciences, Performing Arts, UH Hilo, Chancellor approved, 1/23/18
  - 4. Subject Certificate in Data Science, College of Natural and Health Science, Computer Science, UH Hilo, Chancellor approved, 12/9/17
  - 5. Subject Certificate in Hawaiian & Indigenous Language Medium Early Education, Ka Haka 'Ula O Ke'elikolani, Hawaiian Studies, UH Hilo, Chancellor approved, 1/23/18
  - 6. Subject Certificate in Public Policy, College of Arts and Sciences, Political Science, UH Hilo, Chancellor approved, 1/23/18
  - 7. Concentration in Mathematics, BA in Humanities, UH West O'ahu, Chancellor approved, 2/2/18
  - 8. Concentration in Community Health, BA in Public Administration, UH West O'ahu, Chancellor approved, 2/2/18
  - 9. Subject Certificate in Music, BA in Humanities, UH West O'ahu, Chancellor approved, 2/2/18
  - 10. Concentration in Programming, CO in Electronics Technology, Kaua'i CC, Chancellor approved 2/5/18
  - 11. ASC in Mathematics, Liberal Arts, Kaua'i CC, Chancellor approved 3/1/18
  - 12. CA in Accounting with Tracks in Accounting Assistant, Payroll Preparer, Small Business Accounting, and Tax Preparer, Kaua'i CC, Chancellor approved 1/26/18
  - 13. CO in Aquaponics Technician, Math & Science Division, Leeward CC, Chancellor approved 4/9/18

14. CO in Special Education II, Teacher Education, Leeward CC, Chancellor approved 2/9/18

### **II. Provisional Programs and Certificate Actions**

- A. Provisional Programs Granted Established Status by the Board of Regents:
  - 1. Doctor of Philosophy in Public Health, UH Mānoa, BOR approved, 10/19/17
  - 2. Doctor of Nursing Practice, UH Mānoa, BOR approved, 5/18/18
  - 3. Doctor of Nursing Practice, UH Hilo, BOR approved, 5/18/18
  - 4. CA in Medical Assisting, Kaua'i CC, BOR approved, 5/18/18
  - 5. AS in Health Information Technology, Leeward CC, BOR approved 5/18/18
  - 6. BAS in Engineering Technology, UH Maui College, BOS approved 5/18/18
- B. Extension of Provisional Programs Status approved by the President:
  - 1. BA in Pacific Island Studies, UH Mānoa, President approved 5/10/18
  - 2. BS in Molecular Cell Biology, UH Mānoa, President approved, 5/10/18
  - 3. BA in Pharmacy Studies, UH Hilo, President approved, 6/28/18
  - 4. PhD in Pharmaceutical Science, UH Hilo, President approved, 5/10/18
  - 5. MA in Heritage Management, UH Hilo, President approved, 9/17/2018
  - 6. APC in Culinary Management, Kapi'olani CC, President approved, 1/6/17
- C. Stop-out of Provisional Programs by Campus Administration:
  - 1. Master of Geosciences for Professionals, UH Mānoa, Chancellor approved 5/3/18
- D. Removal of Stop-out and Restoration of Programs as Provisional by Campus Administration:
  - 1. UCert in Aging, UH Mānoa, Chancellor approved, 4/11/18
- E. Termination of Provisional Programs by the President: None
- F. Ongoing Provisional Programs for each Campus:

#### UH Mānoa

College or School	Credential and Program	Provisional Until / Comments
Architecture	BEnvD, Bachelor of Environmental Design	Provisional until 2019.
	Master of Landscape Architecture	Provisional until 2020.
Education	PhD, Learning Design & Technology	Provisional until 2020.

Engineering	BS, Computer Engineering	Provisional until 2016. Targeted to BOR in 2019.
Human Nutrition, Food and Animal Sciences	PhD, Nutrition	Provisional until 2019. Three-year extension until 2022 approved January 17, 2019.
Law	SJD, Doctor of Juridical Science	Provisional until 2021.
Natural Sciences	BA, Astronomy BS, Astrophysics	Provisional until 2019 Provisional until 2019
	BA, Biochemistry	Provisional until 2016. Awaiting CCAO review, est. BOR review targeted in 2019.
	BS, Biochemistry	Provisional until 2016. Awaiting CCAO review, est. BOR review targeted in 2019.
	BS, Ethnobotany	Provisional until 2009. Admission stopped out 2/4/15; Planned termination January 2019.
	BS, Molecular Cell Biology	Provisional until 2019. Extension approved 5/10/18
	MS, Marine Biology	Provisional until 2017. Undergoing program review February 2019. Extension approved 9/4/18.
Natural Sciences/ Ocean & Earth Science & Technology	PhD, Marine Biology	Provisional until 2017. Undergoing program review February 2019. Extension approved 9/4/18.
Pacific & Asian Studies	BA, Pacific Islands Studies	Provisional until 2019. Extension approved 5/10/18

Social Work /Office of Public Health Studies	BA, Public Health  UCert, Aging	Provisional until 2019.  Removal of stop-out approved 4/11/18; effective Fall 2018.  Provisional until 2020.
Tropical Agriculture & Human Resources	BS, Dietetics	Provisional until 2023.
	Master of Environmental Management	Provisional until 2020.

# UH Hilo

College or School	Credential and Program	Provisional Until / Comments
College of Arts & Sciences	BA, Gender & Women's Studies	Provisional until Fall 2019.
	MA, Heritage Management	Provisional until Fall 2017. Extension approved to Fall 2019.
College of Pharmacy	BA, Pharmacy Studies	Provisional until Fall 2016. Extension Approved until 2019.
	MS, Clinical Pharmacology	Currently provisional until Fall 2014; in stop out until Fall 2019
	PhD, Pharmaceutical Sciences	(Fall 2017-Fall 2019).  Provisional until Fall 2017. Extension approved to Fall 2019.

### **UH West O'ahu**

College or School	Credential and Program	Provisional Until / Comments
Education	BEd Middle Level/Secondary	Provisional until Spring 2020
Humanities	BA, Creative Media	Board approval to be sought Spring 2019. If approved, provisional until 2024
Natural Sciences	BA, Natural Sciences (Concentration in Applied Mathematics)	Board approval to be sought Spring 2019. If approved, provisional until 2024

# Hawai'i CC

College or School	Credential and Program	Provisional Until / Comments
Natural Science	AS, Natural Sciences	Provisional until Spring 2017. Targeted to BOR Spring 2019.

# Honolulu CC

College or School	Credential and Program	Provisional Until / Comments
Natural Science	AS, Natural Sciences	Provisional until Spring 2017. Targeted to BOR Spring 2019.

# Kapi'olani CC

College or School	Credential and Program	Provisional Until / Comments
Food Services	APC, Culinary Management	Provisional until Spring 2016. Extension until Spring 2019.
Hospitality, Business and Legal Education	APC, Hospitality Operations Management	Provisional until Spring 2018. Extension until Spring 2019.

# Kaua'i CC

College or School	Credential and Program	Provisional Until / Comments
Creative Media	AS, Creative Media	Provisional until Fall 2018. Target BOR approval Spring 2019.
Natural Science	AS, Natural Sciences	Provisional until Spring 2017. Target BOR approval Spring 2019.
Plant Biology and Tropical Agriculture	AS, Plant Biology and Tropical Agriculture	Provisional until Spring 2018. Stopped out until July 1, 2020.
Sustainability Science	CA, Sustainability Science	Provisional until Fall 2018. Stopped out until July 1, 2020.

# **Leeward CC**

College or School	Credential and Program	Provisional Until / Comments
Education	APC, Special Education PK-12	Provisional until Fall 2019
Integrated Industrial Technology	AS, Integrated Industrial Technology	Provisional until Fall 2021
Plant Biology and Tropical Agriculture	AS, Plant Biology and Tropical Agriculture	Provisional until Spring 2018. Extension until Fall 2019.

**UH Maui College** 

College or School	Credential and Program	Provisional Until / Comments
Creative Media	AS, Creative Media	Provisional until Fall 2018
Natural Sciences	AS, Natural Science	Provisional until Spring 2017. Target BOR approval Spring 2019.

# Windward CC

College or School	Credential and Program	Provisional Until / Comments
Natural Sciences	AS, Natural Science	Provisional until Spring 2017. Target BOR approval Spring 2019.

### III. Established Programs and Certificate Actions

- A. Changes to Established Programs Approved by the Board of Regents:
  - 1. Terminations: None
  - 2. Name Changes: None
  - 3. Degree Changes:
    - a. BA in Chemistry changed to BS in Chemistry, UH Hilo, BOR approved 5/18/18.
    - b. AA in Teaching changed to AS in Teaching, Leeward CC, BOR approved 5/18/18.
- B. Changes to Established Programs Approved by President:
  - 1. Terminations: None
  - 2. Name Changes: None
  - 3. Degree Changes: None
- C. Changes to Established Programs (Concentrations, Minors, Certificates) by Campus Administration:
  - 1. Terminations:
    - a. Environmental Sciences Concentration in Natural Sciences, UH Hilo, Chancellor approved 11/27/17.
    - b. Physical Sciences Concentration in Natural Sciences, UH Hilo, Chancellor approved 11/27/17.
    - c. CO in Accounting with Tracks in Accounting Assistant, Kaua'i CC, Chancellor approved 1/26/18
    - d. CO in Payroll Preparer, Small Business Accounting, and Tax Preparer, Kaua'i CC, Chancellor approved 3/1/18.
    - e. CO in Massage Therapy, Kaua'i CC, Chancellor approved 3/1/18
    - f. CO in Medical Office Receptionist, Business Technology, Kaua'i CC, Chancellor approved 3/1/18.
    - g. CO Mobile Developer in Information and Computer Science, Leeward CC, Chancellor approved 2/9/18.
    - h. CO in Management, Sales and Marketing, Leeward CC, Chancellor approved 2/9/18.
  - 2. Stop-out of Admission in Established Programs:
    - a. Concentration in Environmental Science, BA in Natural Science, UH Hilo, Chancellor approved 11/27/17 (with intent to terminate, Fall 2023).
    - b. Concentration in Physical Science, BA in Natural Science, UH Hilo, Chancellor approved 11/27/17 (with intent to terminate, Fall 2023).
  - 3. Removal of Stop-out of Admission to Established Programs: None
  - 4. Name Changes:
    - a. CO in Computer Support (Name Changed from CO in Computer Support Specialist), Kaua'i CC, Chancellor approved 2/5/18.
    - b. CO in Network Security (Name Changed from CO in Network Security Specialist), Kaua'i CC, Chancellor approved 2/5/18.
    - c. CO in Management, Hospitality and Tourism (Name Changed from CO in Management, Travel Industry), Leeward CC, Chancellor approved 2/9/18.

# UNIVERSITY OF HAWAI'I ACADEMIC PROGRAM ACTIONS REPORT, 2017-2018 Appendix B

### **Review of Established Programs (2017-2018)**

#### UH Mānoa (2017-2018)

Program and Credential	Status / Action
Social Work (BA, MSW)	Completed
Interdisciplinary Studies (BA)	Completed
Architecture (DArch)	Completed

#### Mānoa Program Review Executive Summaries:

#### Social Work:

Social Work was successfully accredited by the Council on Social Work Education (CSWE) for both the BSW and MSW. They received reaffirmation in 2017-18 and the next accreditation visit will be in 2026. The reports can be made available upon request.

#### **Integrated Studies:**

In 2017-2018 Mānoa reviewed the Integrative Studies program, housed under the Assistant Vice Chancellor for Academic Affairs. The link to the full report which contains the IS review is here (on page 13) is here:

https://manoa.hawaii.edu/ovcaa/program\_review/pdf/2018/external\_reviewers\_report\_ou\_e.pdf. The review noted the increasing relevance of IS as a degree and strongly recommended that the program be moved into an academic unit (it currently resides under the Office of Undergraduate Education).

#### Architecture:

Architecture received successful accreditation by the National Architectural Accrediting Board (NAAB) for the DArch degree. The next accreditation visit will be in 2026. The team found the Doctor of Architecture program to be healthy and vibrant with a dedicated faculty and a strong culture of learning. They recommended re-establishing the associate dean position that was eliminated for budgetary reasons. The full report can be made available upon request.

#### **UH Hilo (2017-2018)**

Program and Credential	Status / Action
Japanese Studies (BA)	In Progress
Geography and Environmental Studies (BA)	In Progress
Biology (BA/BS)	In Progress
TCBES (MS)	In Progress

**UH Hilo Program Review Executive Summaries:** Due to personnel changes within the OVCAA in 2017, program reviews scheduled for the 2017-2018 academic year are still in progress.

### **UH West O'ahu (2017-2018)**

Program and Credential	Status / Action
Humanities	In Progress
Social Science	In Progress

**UH West O'ahu Program Review Executive Summary:** The program review process for West O'ahu can be found here: <a href="https://westoahu.hawaii.edu/programreview/">https://westoahu.hawaii.edu/programreview/</a>. Both reviews for Humanities and Social Science are in progress. The Humanities program has completed its self-study and external review, but the review has not gone through the institutional review process yet. The Social Sciences program has completed its self-study but is awaiting the external review report.

## Hawai'i Community College (2017-18)

Program and Credential	Status / Action
Accounting (CA/AS)	Completed
Administration of Justice (AS)	Completed

Auto Body Repair & Painting (CA/AAS)	Completed
Carpentry (CA/AAS)	Completed
Early Childhood Education (CA/AS)	Completed
Tropical Forest Ecosystem & Agroforestry (CA/AS)	Completed

#### Hawai'i Community College Program Review Executive Summaries:

#### Accounting:

Using the metrics established by the HCC review process, the Accounting Program's overall health rating was listed as cautionary but has seen improvement over the review period in terms of number of majors, class size, improvement in the number of small courses, and successful student completion rates. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2015-17%20ACC%20CPR.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/2015-17%20ACC%20CPR.pdf</a>

#### Administration of Justice:

Using the metrics established by the UCC review process, the Administration of Justice Program is listed as cautionary across areas of demand, efficiency, and effectiveness. The program has developed learning outcomes and is working on a plan to improve its program health scores. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/AJ%202015-2017%20CPR%20final.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/AJ%202015-2017%20CPR%20final.pdf</a>

#### Auto Body Repair & Painting:

Using the metrics established by the UCC review process, the Auto Body Repair and Maintenance program was given a cautionary rating. During the period under review the faculty revamped the entire program and are focusing on increasing enrollment. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2017">http://hawaii.hawaii.edu/files/program-unit-review/docs/2017</a> abrp\_comprehensive\_program\_review.pdf

#### Carpentry:

Using the metrics established by the UCC review process, the Carpentry program was given a healthy rating. It was particularly successful at enrolling higher numbers of Native Hawaiian students and in integrating sustainable practices into the practice and

teaching of carpentry. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2017%20CARP%20CPR%20Final.%20approved%20to%20post%202018-07-24.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/2017%20CARP%20CPR%20Final.%20approved%20to%20post%202018-07-24.pdf</a>

#### Early Childhood Education

Using the metrics established by the UCC review process, the Early Childhood Education program was rated as cautionary in demand and effectiveness but health in efficiency. Overall, the program has dealt with rebuilding in the wake of retirements. The program is seeing a trend towards increasing student numbers. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2017\_eced\_comprehensive\_program\_review.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/2017\_eced\_comprehensive\_program\_review.pdf</a>

#### Tropical Forest Ecosystem & Agroforestry:

Using the metrics established by the UCC review process, the Tropical Forest Ecosystem & Agroforestry program is rated as cautionary in part because of the small enrollment. However, as the forestry sector grows it is anticipated to have an impact on enrollments. The full review can be found here: <a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2015-17%20TEAM%20CPR%20final%20to%20post.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/2015-17%20TEAM%20CPR%20final%20to%20post.pdf</a>

**Honolulu Community College (2017-2018)** 

Program and Credential	Status / Action
Architectural, Engineering and CAD Technologies (CA/AS)	Completed
Carpentry Technology (CA/AS)	Completed
Computing, Electronics and Networking Technology (CA/AS)	Completed
Hawaiian Studies (AA)	Completed
Liberal Arts (AA)	Completed
Applied Trades (AAS)	Completed

**Honolulu Community College Executive Summaries:** Five-year program reviews for HCC can be found here: <a href="https://programs.honolulu.hawaii.edu/intranet/node/2465">https://programs.honolulu.hawaii.edu/intranet/node/2465</a>.

Kapi'olani Community College (2017-2018)

Program and Credential	Status / Action
None	Next Program Review Cycle begins 2019

Kaua'i Community College (2017-2018)

Program and Credential	Status / Action
Carpentry Technology	Completed
Electrical Installation and Maintenance Technology	Completed
Culinary Arts	ACFEF Accreditation
Nursing	ACEN Accreditation

#### **Kaua'i Community College Executive Summaries:**

#### Carpentry Technology:

As part of the program review process, the Carpentry Technology program is reviewing its courses to align better with programs throughout the system. There is an emphasis on Green and Sustainable projects and an active Carpentry Advisory Board. The program is looking for ways to improve enrollment and resources. The full review can be found here: <a href="http://info.kauai.hawaii.edu/APRU-CPR-2017/2017-APRU-Carpentry.pdf">http://info.kauai.hawaii.edu/APRU-CPR-2017/2017-APRU-Carpentry.pdf</a>? <a href="ga=2.145382324.1651319457.1549305910-284601121.1542674099">http://info.kauai.hawaii.edu/APRU-CPR-2017/2017-APRU-Carpentry.pdf</a>? <a href="ga=2.145382324.1651319457.1549305910-284601121.1542674099">ga=2.145382324.1651319457.1549305910-284601121.1542674099</a>

#### Electrical Installation and Maintenance Technology:

EIMT was reactivated in 2012 to help focus on renewable energy. The program has been creating relationships since its reactivation. It has an overall health rating as cautionary due to the low numbers of students enrolled in the program. The program continues to work on recruiting students to this program that serves a state need. The full review can be found here: <a href="http://info.kauai.hawaii.edu/APRU-CPR-2017/2017-APRU-Electrical-InstallationMaintenanceTechnology.pdf?ga=2.246044676.1651319457.1549305910-284601121.1542674099">http://info.kauai.hawaii.edu/APRU-CPR-2017/2017-APRU-Electrical-InstallationMaintenanceTechnology.pdf?ga=2.246044676.1651319457.1549305910-284601121.1542674099</a>

#### **Culinary Arts:**

In 2017, the American Culinary Arts Federation Education Foundation Accrediting Commission (ACFEF) reaffirmed accreditation for the Culinary Arts program. The program had an overall rating of healthy and serves to meet a high workforce demand need on Kaua'i. <a href="http://kauai.hawaii.edu/accreditation">http://kauai.hawaii.edu/accreditation</a>

#### Nursing:

In 2017, the Accreditation Commission for Education in Nursing (ACEN) found the Nursing Program in compliance with all six standards and reaffirmed accreditation for the Nursing Program. The program had an overall rating of cautionary but has also increased its program completion rate to 89%, fall to spring persistence to 88.6%, fall to fall persistence to 53.5%, and licensure exam pass rate 82.6%. http://kauai.hawaii.edu/accreditation

**Leeward Community College (2017-2018)** 

Program and Credential	Status / Action
	All programs completed comprehensive program review in previous two academic years. A link to the program reviews and processes can be found here: <a href="http://www.leeward.hawaii.edu/planning-reports.">http://www.leeward.hawaii.edu/planning-reports.</a>

**UH Maui College (2017-2018)** 

Program and Credential	Status / Action
Business Technology (AAS)	Completed
Construction Technology (AAS)	Completed
Culinary Arts (AAS)	Completed
Hospitality and Tourism (AAS)	Completed
Human Services (AS)	Completed

### **UH Maui College Program Review Executive Summary:**

The program reviews for UH Maui College can be found here: <a href="http://maui.hawaii.edu/assets/PDF/AY17-UHMC-Program-Report.pdf">http://maui.hawaii.edu/assets/PDF/AY17-UHMC-Program-Report.pdf</a>. This report provides brief summaries of the programs listed above.

Business Technology: The Business Technology program has established a new learning/capstone course that places students within community agencies. The program is popular and one concern raised in the review is the 71:1 faculty to student ration in the program.

#### Construction Technology:

As a degree preparing students for general building construction and with a new program coordinator has seen a dramatic rise in student enrollment. The program has also developed a solid working relationship with the UHMC Apprenticeship program and the Carpenters Union. This program also has a high student to faculty ration of 62:1.

#### Culinary Arts:

The program engages in continuous self reflection and improvement, integrating Live Text to provide real-time assessment for students. The program is working on budget management for the next review.

#### Hospitality and Tourism:

The program offers a critical degree path for students entering the hospitality and tourism industry. The program has worked on its learning outcomes and student opportunities to engage in internships and on-site projects.

#### **Human Services:**

This program is closely linked to workforce needs and has an active Community Advisory Committee. The program has evolved as the needs of the community have been communicated. The program has had some enrollment issues because of the way a federal grant was calculated, but with the grant having ended in June of 2018 low enrolled courses will no longer be counted toward the fill rate.

### Windward Community College (2017-2018)

Program and Credential	Status / Action
	No programs were up for review in 2017-18.

# **Appendix C: Campus Reports on Programs with Small Number of Graduates**

- I. Campuses without Programs on the Programs with Small Number of Graduate List
  - 1. University of Hawai'i, West O'ahu
  - 2. Windward Community College

# II. Campus Reports Regarding Small Programs

UH Mānoa Small Program Analysis 2017-2018

Program	Review	Actions Taken	Recommendation
College of Tropical Agriculture	Enrollment in the BS program has grown substantially,	Admission stopped-out to the MS program,	Continue the BS in Biological
& Human Resources (CTAHR)	owing to active outreach, recruitment, and strong	effective, Spring 2019 (in preparation for	Engineering. Terminate the MS in
	advising. We expect the number of graduates to	program termination).	Biological Engineering (after final
BS, MS in Biological	average at least 10/year in the coming years.		student graduates). BS scheduled
Engineering			for a program review next
	The Master's program has issues related to recruitment,		academic year (2019-20).
	funding and adequate faculty to teach. Faculty		
	unanimously agreed that the program would be better		
	supported as a track within the larger MS in Molecular		
	Biosciences and Bioengineering.		
CTAHR	The program has been reinvigorated with a modified	Extensive recruitment and advising activities	Continue the program. Program is
	curriculum, redesigned website, marketing materials,	have resulted in an increase in enrollment.	scheduled for a comprehensive
BS, Molecular Biosciences	social media presence and outreach to high school		program review next academic
& Biotechnology	counselors and majors in the Biology program. As a		year (2019-20).
	result, enrollment has increased substantially, and the		
	program experienced its largest graduating class to date		
	in 2018. We expect these numbers to continue to		
	increase as enrollment has increased.		

CTAHR  MS, PhD in Entomology	Both programs contribute to state need through the staffing of Hawai'i's invasive species management effort. The low number of graduates is partly due to a loss of faculty (and resulting decrease in grants).	The department hired two new faculty, and the dean funded research workshops to increase research activity, which should result in more funding for graduate students.	Recommend continuation. Programs are scheduled for a comprehensive program review next academic year (2019-20).
		The MS program is no longer classified as a small program, as it now averages more than 3 graduates/year.	
CTAHR  MS, Food Science; PhD  Nutrition	Food Science suffered from a decrease in tenure-track faculty, which affected enrollment. The Nutrition program underwent a program modification to broaden its focus beyond Human Nutrition to Animal Nutrition. This change, plus a program reorganization has resulted in a substantial increase in enrollment.	New leadership was appointed for both programs. Rachel Novotny serves as the Graduate Chair for the Nutrition program, and with new hires, we expect the funding available for graduate students to increase. The Food Science program is being reconfigured to serve as a feeder for the PhD in Nutrition.	Recommend continuation. Programs scheduled for a comprehensive program review next academic year (2019-20).
CTAHR  MS, PhD in Tropical Plant Pathology	These programs meet state, national and international needs in the prevention and management of tropical plant pathogens in food production and natural systems. The program suffers from a lack of faculty, which affects enrollment.	The dean will reallocate resources made available through anticipated retirements to add two tenure-track faculty to the department to increase student enrollment to meet state need.	Recommend continuation. Programs scheduled for a comprehensive program review next academic year (2019-20).
CTAHR  Ph.D. in Tropical Plant & Soil Sciences	This is the top program for tropical horticulture, and graduates are sought by countries worldwide. The decrease in enrollment is partially due to a decrease in federal funding.	The dean funded a research workshops for junior faculty to increase research activity in the department, which should result in more funding for graduate students.	Recommend continuation, with monitoring. Programs scheduled for a comprehensive program review next academic year (2019-20).
College of Natural Sciences (CNS)  BA Astronomy	The program was approved in 2014, effective Spring 2015. The first cohort, assuming graduation in 4 years, is not anticipated until spring 2019. Enrollment has grown to 20, and is continuing to grow.	No action needed at this time.	Recommend continuation.
CNS  BS Astrophysics	The program was approved in 2014, effective Spring 2015. The first cohort, assuming graduation in 4 years, is not anticipated until spring 2019. Enrollment has grown to 45, and is continuing to grow.	No action needed at this time.	Recommend continuation.

CNS BA, BS Botany	Enrollment in the program has grown to 45. There are discussions to refocus the program on conservation and sustainability. The College is in the process of creating a School of Life Sciences, which will be the home for programs in Botany, Biology, Microbiology, Molecular Cell Biology and Marine Biology. There will be opportunities to coordinate across programs to leverage resources and cross-promote.	The Botany program will be moved into a new School of Life Sciences within the college, which will create opportunities to refocus the program and leverage resources.	Recommend continuation. The program is scheduled for a comprehensive review in the 2019-20 academic year.
CNS BA, BS Physics	The program now averages at least 10 graduates a year, placing it above the threshold. Enrollment remains steady.	The program will continue outreach and recruitment efforts to increase enrollment. Mandatory advising has been effective in decreasing time-to-degree.	Recommend continuation. The program is scheduled for a comprehensive review in the 2019-20 academic year.
CNS  MS, PhD Microbiology	While faculty attrition has had an effect on the program, the MS and PHD programs average about 3 graduates a year. Microbiology will be included in the proposed School of Life Sciences. The reorganization will provide opportunities to leverage, and where necessary, to reallocate resources to support programs in the School.	The Microbiology programs will be moved into a new School of Life Sciences within the college, which will create opportunities to leverage resources.	Recommend continuation. The programs are scheduled for a comprehensive review in the 2019-20 academic year.
CNS Ph.D. Chemistry	The program has a steady enrollment, and the degrees awarded are approaching the threshold (av. 2.8/year). The PhD students serve as TAs for 120 sections of Chemistry lab for our undergraduate students, generating 2500 SSH/year.	Additional tenure-track faculty were hired to support program growth. The program is scheduled for an external review in the 2019-20 academic year, per our review procedures for low-enrolled programs. The external review team will make recommendations.	Recommend continuation. The programs are scheduled for a comprehensive review in the 2019-20 academic year.
CNS Ph.D. Computer Science	UHM offers the only PhD program in Computer Science, and enrollment remains steady at 20. Investments in Data Science are expected to help grow the program.	The program is scheduled for an external review in the 2019-20 academic year, per our review procedures for low-enrolled programs. The external review team will make recommendations.	Recommend continuation. The programs are scheduled for a comprehensive review in the 2019-20 academic year.
CNS Ph.D. Physics	Enrollment is steady at 38 students, and time-to-degree issues have been addressed. The program averages more than 3 graduate/year.	The graduate program implemented annual progress monitoring for all graduate students, which addressed time-to-degree issues.	Recommend continuation. The programs are scheduled for a comprehensive review in the 2019-20 academic year.
CNS Ph.D. Marine Biology	Enrollment is strong at 45 students. The first cohorts are beginning to complete the program. We remain confident that the program will exceed the threshold in a few years.	No action needed at this time.	Recommend continuation.

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College of Languages, Linguistics, & Literature; College of Arts & Humanities; School of Pacific & Asian Studies  Undergraduate Programs  (BA, BFA Dance; BA Religion; BA Classics; BA French; BA German; BA Philippine Languages &	Departments hosting these programs provide a number of courses that support the general education program. With the merger of the Colleges, there will be opportunities to leverage and reallocate resources to support instruction across programs; and coordinate marketing and recruitment efforts to increase enrollment.	Programs will be housed under a merged College, effective Fall 2019.	Recommend continuation. Comprehensive program review of the merged college scheduled for 2020-2021 academic year.
Lit; BA Russian; BA Pacific			
Islands Studies) College of Arts & Humanities	The management is successful and another than Ti	He don the manager there will be a second of	Decommand continuation
MA Art History	The program is successful and cost-effective. The cost of teaching assistants for intro-level courses is less than lecturers.	Under the merger, there will be opportunities to share faculty across Art, Asian Studies, and Pacific Islands studies to leverage resources.	Recommend continuation. Comprehensive program review of the merged college scheduled for 2020-2021 academic year.
College of Arts & Humanities	Enrollment in the program averages 20/year, and the	Under the merger, there will be opportunities	Recommend continuation.
Ph.D. Music	number of graduates in 2018 exceeded the threshold. The faculty are rebuilding the Ethnomusicology program. A new track in conducting (the only graduate program in conducting in the State) will draw more students to the program.	to share faculty across Music, Asian Studies and Pacific Islands studies to support the program in Ethnomusicology.	Comprehensive program review of the merged college scheduled for 2020-2021 academic year.
College of Arts & Humanities	Faculty are rethinking the curriculum and structure of	Under the merger, there will be opportunities	Recommend continuation.
Ph.D. Theatre	the program to address time-to-degree issues. Under the merger, there will be opportunities for closer collaboration, resource leveraging, and coordinated marketing and recruitment.	to leverage resources across Theatre, Music, Asian Studies, and Pacific Islands Studies to support the program.	Comprehensive program review of the merged college scheduled for 2020-2021 academic year.
College of Languages, Linguistics, & Literature (LLL)	Faculty in the department streamlined the curricula across the graduate programs, and voted to merge these into one MA and one PhD for the program to leverage	The MA and PhD programs in Chinese, Japanese, and Korean will be stopped-out, and the curricula merged under one MA and	Recommend continuation under merged MA and PhD programs.
MA, Ph.D. East Asian Languages and Literature (Chinese, Japanese, Korean)	resources and coordinate advising.	one PhD in East Asian Languages and Literature, effective Spring 2020.	
College of Social Sciences (CSS)	Enrollment in the program remains strong, and the	The department increased recruitment	Recommend continuation.
Ph.D., Urban & Regional Planning	time-to-degree is improving. The program averaged 4 graduates/year over the last three years. We expect the program to be removed from the small programs list within the next two years.	activities and mentorship programs to improve time-to-degree.	
CSS	Enrollment remains strong at 30 students, however	Department increased recruiting and advising	Recommend continuation.
Ph.D. in Geography	time-to-degree has been an issue. Through the work of the faculty, the rate has since improved from 2.6 to an	efforts, resulting in an improved time-to-degree.	
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	average of 3/year. We expect the program to be removed from the small programs list in a couple of years.		
School of Travel Industry Management; Shidler College of Business (TIM)  MS in Travel Industry Management	The School is vital for the hospitality industry in the state and Asia-Pacific region. Enrollment has held steady and time-to-degree has improved, and the MS program experiences its larges graduating class last year (10). The 5-year average is now well above the threshold, removing the program from the small programs list.	The School will be merged into the Shidler College of Business, which we believe will invigorate the program and provide additional student support through the Shidler Executive Education unit.	Recommend continuation under the Shidler College of Business.
School of Ocean & Earth Science & Technology (SOEST) BA Geology	The fields of Geology and Geophysics have changed significantly in ways that broaden the program, making it more attractive to undergraduate students. The program (and department) names did not reflect these changes, which we believe affected enrollment.	The faculty voted to change the name of the undergraduate degrees (BA and BS) to Earth Science and Environmental Earth Sciences to reflect these shifts in the discipline. We expect enrollment to increase as a result.	Recommend continuation. Program scheduled for comprehensive review in February 2019.
SOEST  Ph.D. Atmospheric Sciences	The program is internationally distinguished as documented by honors and research awards by faculty. The program creates future leaders in the various disciplines under atmospheric sciences. Enrollment has increased over last year.	The program is scheduled for an external review in February 2019 per our review procedures for low-enrolled programs, and the external review team will make recommendations.	Program scheduled for comprehensive review in February 2019.
SOEST  Ph.D. Ocean & Resources Engineering	The PhD underpins internationally acclaimed research and directly serves state needs (e.g. tsunami evacuation strategy) as well as a workforce shortage.	The program is scheduled for an external review in February 2019 per our review procedures for low-enrolled programs, and the external review team will make recommendations.	Program scheduled for comprehensive review in February 2019.
John A. Burns School of Medicine (JABSOM) BS, Medical Technology	Clinical lab shortages exist across the US and Hawai'i, and UHM offers the only accredited program in the state. Enrollment has increased from 12 to 24 as a result of the new second degree option in MedTech, and we expect the number of degrees conferred to increase.	The second degree option has been successful. The program recently established a preceptorship program for individuals with degrees in microbiology to increase the number of Med Techs in the state.	Recommend continuation.
JABSOM  MS, Ph.D. in Biomedical Sciences (Tropical Medicine)	Enrollment is strong in both programs, and time-to-degree is improving. We anticipate that the programs will meet the threshold within the next couple of years.	Following the 2016 program review, training and career development plans were implemented across programs, and an integrated recruitment strategy with updated recruitment materials were developed.	Recommend continuation.
JABSOM  MS in Biomedical Sciences	New faculty joined the department and graduate program, which reinvigorated the curriculum and research experiences. While the program held one track in Clinical Research, the degree titled in Biomedical Sciences lacked specificity in ways that made the program less attractive. The faculty voted to change the name officially to recognize the curriculum.	Program renamed MS in Clinical and Translational Research, effective Fall 2019. We expect that these changes will lead to an increase in enrollment.	Recommend continuation.
JABSOM	Degrees conferred over the last two years exceeded the	Following the 2016 program review, training	Recommend continuation.

MS in Cell & Molecular Biology	threshold, and we believe the program will be removed from the list in a few years. The program addresses workforce shortages in the state.	and career development plans were implemented across programs, and an integrated recruitment strategy with updated recruitment materials were developed.	
JABSOM  Ph.D. in Developmental & Reproductive Biology	Degrees conferred in 2018 exceeded the threshold.  DRB is a highly specialized program associated with the Institute for Biogenesis Research ("Cloning Lab"), one of the UH recognized centers of excellence.	Following the 2016 program review, training and career development plans were implemented across programs, and an integrated recruitment strategy with updated recruitment materials were developed.	Recommend continuation.
School of Social Work  Ph.D. Epidemiology	The program is rebounding from an admission stop- out. The first cohort after stop-out matriculated in 2011, and the number of degrees awarded are beginning to rise above the threshold. We anticipate that the program will be removed from the list within the next two years. The accrediting agency increased the minimum number of credits from 30 to 42, which has lengthened time to degree.	No action needed at this time.	Recommend continuation.
College of Education (COE)  BS, Kinesiology & Rehabilitation Science (KRS), Health & Physical Education Concentration	Program is listed in error, as it is a concentration within the larger BS in KRS (525 students enrolled, average 115 graduates/year).	The college has been advised to establish an overall Banner major code to correct the error in reporting.	Recommend continuation.
COE  Ph.D. in Educational  Psychology	Enrollment remains steady at an average of 30 students/year, with an average of 3 graduates per year.	The program continues to address state workforce needs in education, testing and research.	Recommend continuation.
College of Engineering Ph.D. in Civil Engineering	Enrollment remains steady, with an average of 30 enrolled/year, and an average of 3 graduates/year.	The date the data is frozen is problematic (fiscal year vs. academic year). Academic year averages are above the threshold.	Program is undergoing program review this academic year.
College of Engineering  Ph.D. in Mechanical Engineering	Enrollment is up slightly, and we anticipate that the average degrees conferred will meet the threshold in a few years. Several actions were taken to address time-to-degree issues and these appear to be working.	The department took the following steps: hired PhD students as TAs; matched funds for final year; and increased cooperating faculty.	Program is undergoing program review this academic year.
Arts & Sciences/Shidler  Ph.D. in Communication & Information Science	Enrollment is strong at 30 students. The program aligns with our strategic initiatives in Data Science, Information Assurance and Health Informatics. Recent campus investments in Data Science are expected to grow the program.	Recent campus investments in Data Science are expected to grow the program, which should have a positive effect on time-to-degree.	Recommend continuation.
School of Social Work  Ph.D. in Social Welfare	Degrees awarded increased significantly this year owing to the implementation of a growth and improvement plan.	The growth and improvement plan focused on recruitment and fundraising; curriculum development, and mentoring.	Recommend continuation. Program is undergoing program review this academic year.

#### **UH Hilo Small Program Analysis 2017-2018**

Small Program	Review	Actions Taken	Recommendation
Physics 1/30/19	Most majors are double majors with Astronomy, program works hand in hand with Astronomy. A new path has been set up for students to double major in Math and Physics. Program provides an average of 54% of their semester course offerings as GE courses and required courses for other STEM degrees.  Continued collaboration with learning assistant program to increase retention rates in the Physics program. Physics attracts local students interested in engineering and technology, thus continued outreach in high school to inform local residents job prospects and affordability of UHH education.  Physics graduates work as much needed high schools science teachers after receiving a Master of Arts in Teaching degree or DOE certification.	Continued collaboration with learning assistant program to increase retention rates in the Physics program. Physics attracts local students interested in engineering and technology, thus continued outreach in high school to inform local residents job prospects and affordability of UHH education. Promote participation of undergraduates at national meetings and application to internships. UHH and UHM have worked closely to align the core physics courses to allow transfers in an effort to increase retention.	Continuation of program.
Astronomy 1/30/19	Utilizes unique resources found on the Island of Hawai'i, the nation, and arguably one of the best sites in the world. Program provides an average of 43% of their semester course offerings as GE courses. Graduates from the program secure jobs at the summits of Maunakea, Maunaloa, Haleakala, and other observatories in the world, in addition to outreach experts for planetaria and science museums.	Increase retention by offering all required upper division courses in physics and astronomy for on-time graduation and better advising of incoming freshman. The department is working closely with the James Clerk Maxwell and the Subaru observatory to train students to use professional grade telescopes and instruments. Increase opportunities for students to work on projects using Maunakea telescopes.	Continuation of program.
Natural Science	BA degree that prepares students to become science educators. The program is no-cost which uses courses from other departments as program requirements and only offers one capstone course annually. This program fulfills a workforce, state and UH need in providing well trained STEM area teacher candidates.	The degree program has recently coordinated with the UH Hilo School of Education's Educational Studies Certificate to encourage students to complete the certificate as a part of their BA program which will help STEM students be better prepared for application to the UH Hilo Master of Arts in Teaching program.	Continuation of program.
Liberal Studies	The Liberal Studies program is a no-cost program that works with students who choose to create their own major and to assist students in unique circumstances. This program is an	N/A	Continuation of program.

	essential component of a liberal arts education.		
Mathematics	The Mathematics program provides an average of 76% of semester course offerings as GE Requirements.  Approximately 94% of the courses offered each semester are required by other degrees across campus with each course averaging 20.3 students. On average, the department offers only 2 courses per semester that serve only math majors.  The Mathematics program contributes to the number of graduates of UHH School of Education MAT program. In the past 5 years, 13 graduates of the MAT program were Math majors at UHH.	The program curriculum has been revamped for Fall 2019 to streamline our major's sequence of courses. These changes help promote more options for our students and transfers, as well as improve overall enrollment numbers in our upper division classes. The changes to the curriculum will also allow for seamless transfer from the UHCCs. The change also promotes Math/STEM double majors providing graduates a competitive advantage in the Workforce.  In Fall 2019, the program will implement corequisite courses for the pre-calculus track as data shows this model significantly increases retention rate Math majors have a 74% retention rate and we will continue to strengthen research and opportunities.  The Mathematics program is currently assisting in the development of the Data Science Program using NSF EPSCoR grant.	Continuation of program.
Geography	The Geography program recently merged with the Environmental Studies BA program which was added to the Geography BA as a program track. Since the merge the program has seen an increase in majors. This program addresses state need and UH priority in the area of Environmental Conservation.	Continue monitoring enrollment numbers. The increased major numbers should translate into increased graduation numbers soon.	Continuation of program.
Environmental Science	Since receiving established status in Fall 2016, the program has seen an increase in declared majors and graduates and anticipates this trend will continue. This program addresses state need and UH priority in the area of Environmental Conservation.	Continue monitoring enrollment numbers.	Continuation of program.
Performing Arts	Program has recently hired a new tenure-track faculty member after losing its only tenured faculty member to retirement. The program serves a unique need to the community of Hawai'i Island and also provides a multitude of courses each semester that contribute to the GE program.	Revision of major requirements is underway to better serve students and develop a clearer path to graduation.  Begin exploring possible double major opportunities.	Continuation of program.

Chemistry	The Chemistry degree was recently approved to be switched from a BA to BS in Fall 2018. We anticipate increased enrollment due to the updated credential. The program contains two tracks: Physical Chemistry and Biosciences. The Chemistry department also provides an average of 64% of their semester course offerings as GE courses.	Explore opportunities to increase the number of double majors with Biology with the Chemistry-Biosciences track.	Continuation of program.
Geology	The Geology program utilizes unique resources found on the Island of Hawai'i to offer a diverse program. Contributions of the Geology Department to volcano-related natural hazards highlight its importance to the Island of Hawai'i.	Program review underway. Number of graduates is just below 10. Program graduates nearly as many students as the combined Geology BA and Geophysics BS programs at UH Mānoa.	Continuation of program.
Japanese Studies	The Japanese Studies program is a culturally important program to Hawai'i Island and the State. Program offers an average of 95% of their semester courses as GE courses.	Program review underway.  Recent departmental conflicts have been resolved which encourages retention.  Examining the possibility to incorporate JPNS, Chinese Studies, & Filipino Studies certificates in an Asian Studies program using present resources to attract a wider student interest.	Continuation of program.
Hawaiian Language and Literature	The Hawaiian Language and Literature program fulfills a State of Hawai'i need and UH Priority and also distinguishes UH Hilo Nationally and Internationally. The program admits students as a cohort on average every two years. The most recent cohort started in Fall 2018.	The college is currently reviewing the program to increase efficiency and timeliness of student graduation numbers including searching for additional student scholarship funds. The program utilizes small cohort model to ensure high quality of graduates.	Continuation of program.
Indigenous Culture Education	The Indigenous Culture Education program fulfills a State of Hawai'i need and UH Priority and also distinguishes UH Hilo Nationally and Internationally. The program admits students as a cohort on average every two years. The most recent cohort started in Fall 2018.	The new cohort includes 14 students, all practicing Hawaiian immersion classroom teachers. This program is filling a critical teacher shortage area for Hawaiian immersion classrooms statewide and was designed as part of a professional development pathway to support increased teacher quality. The program continues to actively search additional scholarship funding.	Continuation of program.
Hawaiian and Indigenous Language and Culture Revitalization (MA)	The Hawaiian and Indigenous Language and Culture Revitalization program fulfills a State of Hawai'i need and UH Priority and also distinguishes UH Hilo Nationally and Internationally. The program admits students as a cohort on average every four years. The most recent cohort started in	The new cohort started in Fall 2018 with 10 new PhD students. The program draws from local, national and international students in this high specialty area focusing in language and culture revitalization. The college is actively seeking	Continuation of program.

	Fall 2018.	additional student scholarship funding to assist with student retention.	
Pharmaceutical Sciences	The Pharmaceutical Sciences program recently had its first graduates complete the program.	Application for established status is due in 2019.	Continuation of program.

#### Hawai'i Community College Small Program Analysis 2017-2018

Small Program	Review	Actions Taken	Recommendation
CA-PRCN	Certificate of Achievement for Practical Nursing. This program has an enrollment capacity of 10 students admitted once per year in Hilo. All seats are filled every application cycle.  Interest in the PN program is decreasing as more students are aiming for the Registered Nurse (RN) license. Of those accepted to the PN program, many use it as a pathway to the RN program (AS-NURS)	No action for Hilo cohort.	Continue of program.
BTEC Certificate	The BTEC program fills a need for qualified office clerks in our community. The overall health of the BTEC program as indicated by the ARPD analysis is HEALTHY.	The BTEC program has modified its offerings to be on a one-time-a-year schedule to ensure that classes are sufficiently filled. In addition, the Haw CC program collaborates with UHMC to streamline course offerings so that we are able to fill courses across the system, not just at the campus level.  Renewed engagement and recruitment efforts started this past semester to encourage higher	Continuation of program.
	There is no cost to offer the certificate programs since those programs are embedded in the associate degree.		
	There is currently only one full-time teaching faculty in the program who is supported by lecturers.		
	In addition, BTEC classes provides skills to non-majors, which is evident by 642 SSH Non-Majors in program classes from 2015-2016.	enrollment in the program. In addition, an updated articulation agreement with local high schools is being worked on.	

BTEC Associate	The BTEC program fills a need for qualified office clerks in our community. The overall health of the BTEC program as indicated by the ARPD analysis is HEALTHY.  There is currently only one full-time teaching faculty in the program who is supported by lecturers.	The BTEC program has modified its offerings to be on a one-time-a-year schedule to ensure that classes are sufficiently filled. In addition, the Haw CC program collaborates with UHMC to streamline course offerings so that we are able to fill courses across the system, not just at the campus level.	Continuation of program.
	In addition, BTEC classes provides skills to non-majors, which is evident by 642 SSH Non-Majors in program classes from 2015-2016.	Renewed engagement and recruitment efforts started this past semester to encourage higher enrollment in the program. In addition, an updated articulation agreement with local high schools is being worked on.	
Accounting, Associates of Applied Science	The Accounting (ACC) program fills a need for qualified entry-level accounting staff and bookkeepers in our community. The program also provides essential skills to non-majors.  There are two options for students within the ACC program, a certificate of achievement (CA) or associates of applied	The Accounting (ACC) program has modified its offerings to be on a one-time-a-year schedule to ensure that classes are sufficiently filled. Also, the Haw CC program collaborates with UHMC to streamline course offerings so that we can fill courses across the system, not just at the campus level.	Continuation of program.
	currently, the program has two full-time teaching faculty who are supported by lecturers. Face-to-face mode classes have a capacity of 20 students, and the distance education (online) classes have a 25 student capacity.	The program is offering more distance education classes and making efforts to incorporate open educational resources to reach students who do not enroll because of full-time employment, the proximity of where they live to the college, or economic means.	
		Required courses are being reviewed and revised to optimize both student learning and time spent earning their degree.	

Marketing, CA	This program is designed for students planning a career in the field of merchandising/marketing.	No additional cost	Continuation of program.
Marketing, AAS	This program is designed for students planning a career in the field of merchandising/marketing.  The ARPD overall health rating for this program is healthy and has been improving over the past few years.	The MKT program is in the process of updating its course offerings and potentially changing its degree from as AAS to an AS. Draft changes have been created and program faculty will be working with CRC to implement changes.  Also plan to offer DE courses to provide students options that work to meet their needs.	Continuation of program.
		The program does well in retention and completion. Strategies will be implemented to improve the numbers of students to enroll in the program.	
Information Technology, CA	This program is a career-laddered program that provides training in the use and support of business-related computer systems, data communication networks, and the development of business computer information systems programs and focuses on using computers and information technology as tools to solve business problems.	No additional cost.	Continuation of program.
Information Technology, AS	This program is a career-laddered program that provides training in the use and support of business-related computer systems, data communication networks, and the development of business computer information systems programs and focuses on using computers and information technology as tools to solve business problems.	The IT program is working on increasing enrollment in the program and examining current course offerings to see if changes need to be made to the curriculum to meet industry demands. Specifically, research will be done to look at expanding cybersecurity and programming courses such as website and app development.	Continuation of program.

Natural Science, AS	This is a new program which has been growing each year.	We continue to recruit and add required courses to the curriculum.	Continuation of program.
Tropical Ecosystem and Agroforestry Management, CA	No additional cost.	No additional cost.	Continuation of program.
Tropical Ecosystem and Agroforestry Management, AS	The degree provides a critical training for on-island employers in the Conservation field.  100% of the 200-level science courses are offered through the TEAM Program. The program brings in and is largely supported by grant funds (ca \$100,000/year) and collaborates closely with programs like Agriculture and Hawaiian Studies.	Faculty and student workers are making a concerted effort to attend community and high school events. Student recruitment is ongoing and is resulting in larger classes. Required courses are being reviewed and revised to make transfer to a 4-year institution smoother for program graduates.	Continuation of program.
Architectural ENG & CAD Tech - CA	The AEC Program has continued to have maximum enrollment. Due to the limited space of our facility, our course cap is set at twelve. Also, AEC's curriculum has changed to provide students with more options: one CA in Architecture, one CA in Surveying, and two CO's in Surveying along with the AAS degree. Although students are encouraged to complete the AAS degree, it is not always feasible due to time constraints or cost. The creation of online courses has allowed a number of AEC students to enroll in just one or two courses to enrich their skills for their employment. Having these many choices available, many students choose to achieve their certificates and further dilutes the graduation count in both areas resulting in low numbers.	AEC will continue to advise students and follow up with them to cut down on attrition. AEC also continues to participate in numerous job/career fairs to promote our program and student projects. AEC is also working with other University of Hawai'i Campuses to offer students more flexibility. We are also looking at industry needs and if viable would like to expand capacity provided funding is available.	Continuation of program.
Agriculture - CA	AGR classes are currently at maximum. Having currently only one faculty the cap is at 14 students. AGR program also offers two options for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has complete	We are currently modifying our program to try and meet the Hawai'i Sustainability Initiative,  Therefore, anticipating growth in the program. If favorable, the program will start another cohort	Continuation of program.

	area requirements of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however many students choose CA over AAS due to the cost/time factor. Even if the program graduates all of their students, with a maximum enrollment cap at 14 students and the choice of CA or AAS, the graduation count may be low in both areas. Also, the program offers two Certificates of Competence that students can complete and leave with salable skills to enter the Ag industry and not complete either CA or AAS degree	provided that funds are available.	
Machine, Welding and Industrial Mechanics Technologies – CA	MWIM program offers two option for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has a complete area requirement of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however if some students will choose the CA option and others choose the AAS option. Having these two choices available, dilutes the graduation count in both areas resulting in low numbers.	Continue to encourage students to take both CA & AAS options. Work with counseling and course planning to have the area requirements to be in a more conducive time for students.	Continuation of program.
Diesel Mechanics - AAS	DISL program have recently changed to a biennial cohort because of having only one faculty. Class cap are at maximum however, numbers will be inaccurate due to the fact the program will have graduates every other year. Even if they always graduate all of their students, with a maximum enrolment cap at 20 students every other year, their average will always below at the 10 level. This is based on the three year average of this report.	Currently doing a study on industry employment growth. If favorable, the program will implement a second cohort provided that funds are available.	Continuation of program.
Carpentry Technology - AAS	The CARP program has two pathways for graduation, CA and AAS at no additional cost. Data indicates that in a three-year average CA awarded is above the set criteria. The CARP program has consistently enjoyed maximum enrollment of 16 students for many years and has a consistent "Healthy"	Continue to encourage students to choose the AAS option.	Continuation of program.

	program review. However, the CARP program over the past three years, students have chosen to do the CA pathway.		
Architectural ENG & CAD Tech - AAS	The AEC Program has continued to have maximum enrollment. Due to the limited space of our facility, our course cap is set at twelve. Also, AEC's curriculum has changed to provide students with more options: one CA in Architecture, one CA in Surveying, two CO's in Surveying along with the AAS degree. Although students are encouraged to complete the AAS degree, it is not always feasible due to time constraints or cost. The creation of online courses has allowed a number of AEC students to enroll in just one or two courses to enrich their skills for their employment. Having these many choices available, many students choose to achieve their certificates and further dilutes the graduation count in both areas resulting in low numbers.	AEC will continue to advise students and follow up with them to cut down on attrition. AEC also continues to participate in numerous job/career fairs to promote our program and student projects. AEC is also working with other University of Hawai'i Campuses to offer students more flexibility. We are also looking at industry needs and if viable would like to expand capacity provided funding is available.	Continuation of program.
Auto Body Repair & Painting – AAS	ABRP program offers two option for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has a complete area requirement of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however many students choose CA over AAS due to the cost/time factor.	Continue to encourage students to take AAS as the first option. Work with counseling and course planning to have the area requirements to be in a more conducive time for students.	Continuation of program.
Agriculture – AAS	AGR classes are currently at maximum. Having currently only one faculty the cap is at 14 students. AGR program also offers two options for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has complete area requirements of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however many students choose CA over AAS due to the	We are currently modifying our program to try and meet the Hawai'i Sustainability Initiative, therefore anticipating growth in the program. If favorable, the program will start another cohort provided that funds are available.	Continuation of program.

	cost/time factor. Even if the program graduates all of their students, with a maximum enrollment cap at 14 students and the choice of CA or AAS, the graduation count may be low in both areas. Also, the program offers two Certificates of Competence that students can complete and leave with salable skills to enter the Ag industry and not complete either CA or AAS degree.		
Automotive Mechanics Tech - AAS	AMT program offers two option for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has a complete area requirement of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however many students choose CA over AAS due to the cost/time factor.	Continue to encourage students to take AAS as the first option. Work with counseling and course planning to have the area requirements to be in a more conducive time for students.	Continuation of program.
Machine, Welding and Industrial Mechanics Technologies – AAS	MWIM program offers two option for graduation (CA & AAS) at no additional cost to the college. These are options that students choose according to their education needs. CA is a skill/technical/soft skills based certificate. AAS has a complete area requirement of general education courses in addition. With either graduation options a student will enjoy gainful careers. Students are encouraged to take the AAS degree however many students choose CA over AAS due to the cost/time factor.	Continue to encourage students to take both CA & AAS options. Work with counseling and course planning to have the area requirements to be in a more conducive time for students.	Continuation of program.
Hospitality and Tourism (HosT) CO, CA, and AAS	According to the World Trade Organization (WTO), the travel and tourism (hospitality) industry is the world's largest employing industry as well as being the largest employing industry for the State of Hawai'i. Subsequently, our Hospitality and Tourism (HOST) program was initially designed to provide job training for entry-level and first line supervisory level positions in the hospitality/visitor industry.  We currently offer a Certificate of Competence (CO), Certificate of Achievement (CA), and an Associate in Applied Science (AAS) degree. Not only do they serve to	Necessary changes commenced in 2018 with Anne Chung assuming the role of Program Chair and the acquisition of Lynn Erdmann, an industry professional and experienced instructor to fill the long vacant role of Program Coordinator.  The program is currently undergoing a needs assessment to determine eventual, required program changes that will not only serve to update and deliver a more improved level of educational content and hands-on experience, but	Continuation of program and require program to grow to meet criteria by next review.  Mr. Ross Birch, CEO of the Island of Hawai'i Visitors Bureau and member of the HOST Advisory Board, provided this quotation in support of these

	provide the only post-secondary hospitality and tourism program on the Big Island, but the delivery of these competencies also serves to fulfill our program's mission to ensure a skilled pool of workers is continuously available to meet the island's industry employment demand.  The program has experienced a series of setbacks throughout the years with the departures of its architect and its program chair. With the absence of industry experienced faculty and/or administrators, the curriculum has barely experienced routine, disciplined review and assessment processes nor has it been subject to an extensive needs assessment to determine necessary program changes. While recruitment has been minimal with secondary parties serving to promote the	also broaden the scope of our student target markets.  Steps are currently underway to build a "living", long-term industry mentorship program that will improve the relationship between the college and the industry but also provide more hands-on, learn-and-earn programs for our students.  Processes are also underway to transition standard, subject-related courses to an online delivery thus allowing increased distance education enrollment opportunities for students residing at great distances whether here on the	recommendations:  "The Hospitality and Tourism (HOST) program at HCC has, basically, been neglected, thus it must be allowed to (re)build its reputation and this takes time. A heightened brand reputation will result in increased enrollment.  Also, during those times when tourism numbers
	minimal with secondary parties serving to promote the program at occasional job fairs, personnel have not existed to promote long-term, ongoing relationships with the island's high schools and industry leaders.  In summary, our program has existed with the support of industry experienced lecturers and is poised to begin a building process that will better provide for the contemporary needs of our current and future target markets.	Big Island or on any of the other islands.  Two new certificate programs are being developed that will, eventually, serve to attract enrollment by those who do not desire an associates degree but do desire industry certifications that will benefit them world-wide.  A long term assessment might be to determine how our AAS degree might be redesigned to allow for a more accommodating transfer into the UH Travel and Industry Management (TIM) program at Mānoa.	fluctuate and unemployment increases, it is imperative that hospitality education is available to those seeking to better their position. With some refinement, it is the HOST program that can be positioned to provide those educational opportunities."
Early Childhood Education			

#### **Honolulu Community College Small Program Analysis 2017-2018**

Small Program	Review	Actions Taken	Recommendation
Hawaiian Studies Associate	The HWST-AA program was recently approved as an	We recently added a Ho'okele (voyaging)	Continuation of program.
in Arts (HWST-AA)	established program in 2017 and is part of Hon CC's and the	concentration to the 'Ōlelo (Hawaiian language)	
	UH System's Hawai'i Papa o Ke Ao plan of being a model	concentration, which should further support	
	indigenous-serving institution. We do not anticipate	demand through student interest and better	
	additional costs to continue the program, as HWST-AA	enrollment in courses. To improve retention and	
	program faculty and courses are part of the Liberal Arts AA	graduation rates, we plan to use focus groups and	
	program. Although program completion numbers are small,	surveys to ask current majors about challenges	

	there is a steady growth in enrollment and the ARPD for 2016-2017 indicates an overall "healthy" demand rating.	they face that may prevent them from completing their degrees and about the kinds of resources they need to succeed.	
Associate of Science in Natural Science (ASNS)	The ASNS program began in 2014 and remains a "provisional" program until deemed "permanent" in Spring 2019. It supports Hon CC's and UHCC's commitment to increasing STEM graduation rates and transfer to baccalaureate STEM programs, and to meet current and future workforce needs in STEM-related jobs. We do not anticipate additional costs to continue the program, as ASNS program faculty and courses are part of the Liberal Arts AA program. The ARPD for 2016-2017 indicates an overall "healthy" demand for the ASNS program.	To improve degree completion rates, time is needed to fully establish and promote the program. Hon CC is nearing completion of filling vacant instructional faculty positions in natural science and math, positions that are housed within the liberal arts (University College) unit of Hon CC. Last, Hon CC plans to continue seeking federal and private grants to build capacity and enrollment in engineering (e.g., PEEC II) and geo/environmental sciences (e.g., PAGE). Such grants support curriculum development, recruitment of students, mentoring of students, and providing undergraduate research opportunities in STEM and the ASNS program.	Continuation of program.
Aeronautics Maintenance Technology (AS)	The AERO program is the only program in the state that prepares airframe and power plant mechanics, and the majority of students entering the AERO program seem to be primarily concerned with receiving their FAA Airframe and Powerplant Certification. There are far more jobs in the state available than graduates, and the completion rate does not reflect the Certificates of Completion, which is what most of our students wish to attain. That said, there was an increase of graduates in 2018 (3 to 8). Moreover, due to FAA regulations based on instructor-to-student ratio, Hon CC is not allowed to admit more students that we currently do. Even though the program anticipates attrition, the FAA regulations do not allow over enrollment of students.	The program is experimenting with hosting daylong orientation on the airport site (which is where the program is taught) so that incoming students are aware of the conditions of the classroom and hands-on instruction. It is also tying in industry exposure so that students are aware of the multitude of job opportunities for completers. The program is also trying to hire enough faculty and staff to keep up with student demand.  If the CA student graduate numbers were to be combined with AS graduate numbers, this would not be considered a small program.	Continuation of program.
Electrical Installation & Maintenance Technology (CA only)	The Electrical Installation and Maintenance Technology Program curriculum is designed to prepare students with the entry level knowledge and manipulative skills for employment in the electrical industry. The program combines theory with laboratory activities as an effective means of developing skills essential to the electrical trade. Unfortunately, the program has, and continues to struggle with hiring qualified faculty to teach in this high-demand field. Because the industry has been hiring so many students and potential students in the EIMT field with high wages, the program has struggled with retention.	In conjunction with Academic and Student Support areas, faculty, staff, and administration are also working to consider waitlist functions for registration and guidance services catered to specific students' needs to better inform and guide students who are waiting to register for the program, as this is a highly popular program, which is unable to accommodate all the students who want to enroll. Concerted efforts of faculty, staff, and administration are underway to fill the second FTE faculty position, as the program has had to stop out a cohort in Fall 2018.  If the CA student graduate numbers were to be	Continuation of program.

		combined with AAS graduate numbers, this	
		would not be considered a small program.	
Sheet Metal & Plastics Technology (AAS/CA)	The SMP curriculum is designed to qualify students for entry into the field of sheet metal as apprentices. They will develop skills in fabricating air conditioning ducts; architectural metal work; welding and fabricating plastics; and, pattern development. The strength of the SMP program is its partnership with the industry. Their advisory board meets every semester to review the program needs and student learner outcomes. Due to an agreement with the local union (indicative of industry support of SMP), students enrolled in the SMP program are able to enter into the apprenticeship program after completion of the first year. Industry has been hiring the SMP students after their first semester, due to the booming economy and workforce demand, and this has clearly affected the numbers.	Hon CC has been working closely with the Sheet Metal industry to point out that the better apprentices and employees are the ones who finish the SMP program. Although the companies have agreed to be more cautious about taking students after just one semester, the immediate demand for employees by the workforce continue to be a problem. If the CA student graduate numbers were to be combined with AAS graduate numbers, this would also meet the criteria to be removed from the small programs list.	Continuation of program.
Diesel Mechanics Technology (AS)	As the Diesel Mechanics Technology program is a two-year program with a single faculty member, intake occurs only every other year. The program was granted NATEF certification in May 2017. The Hon CC DISL program is the only professional training facility on Oʻahu; the other facility in the state is on the Big Island. The program holds a well-attended advisory board meeting semi-annually, holds trainings with industry partners, and communicates often with potential employers of graduates, noting high satisfaction with graduates and the program overall.	Given the recent industry certification, restructuring of the program, and increase in student demand, we expect increases in completion numbers, though new cohort intake in alternating years should also be taken into consideration.	Continuation of program.
Occupation and Environmental Safety Maintenance (AS only)	As a growing field, the two-year Occupation and Environmental Safety Maintenance program is designed to provide practical training in occupational and environmental safety and health. Besides an AS degree, the program is fully articulated with BA programs at UHWO and Columbia Southern University. As the market for OESM graduates and skill sets increases and jobs are abundant, program majors are finding employment prior to graduation. Students in the program tend to be those already in the OESM field who tend to take classes in the evening or on weekends, studying around their work schedules.	Hon CC is working with the OESM faculty to ensure that students are aware of better job opportunities upon graduation. The faculty are also working on "purposeful engagement" activities in and out of the classroom to encourage retention in the program. If the CA student graduate numbers were to be combined with AS graduate numbers, this would not be considered a small program.	Continuation of program.
Communication Arts (AS)	Communication Arts is a graphic design program that integrates art and technology to communicate ideas and information for a range of creative media. The program has prepared students for entry-level work in graphic design and traditional print services. Low graduation rates, declining program major headcounts, and faculty retirements created an opportunity in 2017-19 for the College to continue the	In the Fall 2019, the program will begin to restructure the degree to decrease the overall number of credits required for graduation, and integrate relevant coursework to support careers in Hawai'i's creative industries. The College will require the program to strengthen relationships with UH West O'ahu and the	Require to grow by Fall 2024.

	program and implement a phased, comprehensive program improvement plan, which will consist curricular redesign, enhanced student recruitment/support activities, and continuous action-oriented assessment.	Academy for Creative Media. The program will also design a robust student outreach plan to support direct participation with the surrounding high schools to increase student major headcount. Finally, as a CTE program, stronger industry work-based student learning opportunities will play an important role to improve student retention and enhance job placement.	
Early Childhood Education (CA only)	The ECED program is aligned with the University of Hawai'i's Strategic Plan to produce qualified and competent teachers for Hawai'i's early childhood community. As the only formalized training program on O'ahu, the ECED program serves to meet a critical workforce shortage in Hawai'i by creating open-access learning opportunities to support Hawai'i's early learning workforce needs. The Hawai'i Department of Education is preparing to open 5 new public pre-school sites per year starting in 2020, and Governor Ige just proposed 300 new public pre-school classrooms for the 2019-2021 biennium budget. The projected increase highlights the need for a pipeline of early learning professionals.	The CA will continue to be offered and will be modified to include courses that are prerequisites for UH West O'ahu's Bachelor's in Social Science, Early Childhood Education concentration degree for students with an AA or AS in another field who want to enter the UHWO's degree program. The new certificate will have 31 credits, which would meet the National Education for the Education of Young Children's teacher education qualifications for degreed professionals entering from another industry.  If the CA student graduate numbers were to be combined with AS graduate numbers, this would not be considered a small program.	Continuation of program.
Fashion Technology (CA/AAS)	The Fashion Technology program is local and nationally recognized as an educational leader in Hawai'i's fashion and design community. It has been featured in national television shows and has educated top local and national designers. The program provides training for students to enter careers in design and merchandising.	To address the decline in degree and certificate completion, the College will continue to offer the program and require the program to restructure current certificate offerings and implement early college high school recruitment strategies. In 2018, the program was awarded a three-year Perkins grant to improve student persistence and completion through the implementation of comprehensive student support services, industry engagement opportunities, and early college high school coursework. These efforts are being implemented and will be evaluated to determine programmatic impact.  If the CA student graduate numbers were to be combined with AAS graduate numbers, this would not be considered a small program.	Continuation of program.
Human Services (CA/AAS)	The Human Services program has maintained strong academic program quality through relevant academic coursework, required service learning opportunities, and guided transfer pathways to UH Mānoa, UH West Oʻahu, and	Hon CC plans specific improvements to implement program advising sessions for all new and continuing Human Services student majors.  Program faculty will also work closely with the	Continuation of program.

non-UH 4-year Colleges. The program prepares graduates	Division Chair to identify opportunities to	
for a variety of paraprofessional positions within the human	restructure current certificate offerings and	
services and social work fields. Projected employment	improve alignment with industry partners. The	
within the State of Hawai'i indicates a strong, faster than	Division Chair and program faculty will also use	
average growth, particularly in the "Community and Social	the required internship courses to identify	
Service Occupation (SOC 21-0000)."	whether or not students are being hired before	
	graduation due to the high workforce demands.	
	If the CA student graduate numbers were to be	
	combined with AS/AAS graduate numbers, this	
	would not be considered a small program.	

Kapi'olani Community College Small Program Analysis 2017-2018

Small Program	Review	Actions Taken	Recommendation
Hawaiian Studies Associate	The HWST-AA program was recently approved as an	To improve retention and graduation rates, we	Continuation of program.
in Arts (HWST-AA	established program in 2017 and is part of Kapi'olani's and	have focused efforts on Native Hawaiian part-	
	the UH System's Hawai'i Papa o Ke Ao plan of being a	time students and have dedicated student support	
	model indigenous-serving institution. We do not anticipate	services to provide resources and assistance in	
	additional costs to continue the program, as HWST-AA	the form of scholarships, Food Pantry, and other	
	program faculty and courses are part of the Liberal Arts AA	support to help them to succeed	
	program. Although program completion numbers are small,		
	there is a steady growth in enrollment		
Respiratory Care (AS)	The Respiratory Care program is the only degree credential	16 students graduated from the program in 2018,	Continuation of program.
	(AS) in the state of Hawai'i which leads to national board	13 students in 2017, and 15 students in 2016.	
	certification as a Registered Respiratory Therapist (RRT).		
	Students who graduate with an AS degree may then transfer	Students do their final clinical internship during	
	to UHWO to complete a BAS degree in Respiratory Care.	Summer Sessions I and II. The AS degree is	
	These past three years, students who graduated from the	conferred each year in August which might	
	program had a 100% board exam pass rate and a job	account for any discrepancies in tabulating the	
	placement rate between 94% to 100%.	number of successful program completers.	
Educational Paraprofessional	The program is under review and went from 25 students four	There is a CO and AS in EDPA-SLT that will be	Continuation of program.
(AS)	years ago, down to five students two years ago, and now back	undergoing an internal name change to better	
	up to 21 students. There is a CO and an AS in EDPA-SLT.	reflect the TESOL training program. An MOA	
		with the DOE is currently in the works which	
		will fully fund teachers to complete SLT	
		coursework to become highly qualified, licensed	
		ESL teachers. The MOA is expected to support	
		40 teachers each fall and the program will	
Mobile Intensive Care	The Melile Interview Come Technicies Duranessis demandent	expand.	Ctititi
	The Mobile Intensive Care Technician Program is dependent	In conjunction with the Department of Health,	Continuation of program.
Technician (CA and AS)	upon the needs of the state for paramedics, and classes are	the faculty and administration are working to	
	provided upon request. Students typically complete the CA	determine a year-round training schedule to match the needs of the state on Hawai'i, Maui,	
	which allows them to sit for the national paramedic licensing exam to meet the requirements for employment, as not all	Kaua'i, and O'ahu.	
	exam to meet the requirements for employment, as not an	Kaua i, and O and.	

	students continue on to complete the General Education	If the CA and AS graduate numbers were to be	
	requirements for an AS degree.	combined, this would not be considered a small program.	
		Program records indicate that in 2016, there were	
		11 students who completed the CA; 18 students received the CA in 2017; and 19 students	
		received the CA in 2017, and 19 students received their CA in 2018.	
		Before the CA or AS degree is conferred,	
		students must first complete both a written board	
		exam and a day-long psychomotor skills exam.	
		These exams are at times scheduled outside the	
		normal academic year which might account for any discrepancies in tabulating the number of	
		successful program completers.	
Dental Assisting (CA)	The two-semester CA program is accredited by the	The current DENT CA includes 13 credits of	Continuation of program.
	Commission on Dental Accreditation. Graduates are eligible	GEN ED coursework. The CA is only awarded	
	to take the national exam to become certified dental	upon completion of all DENT courses (2	
	assistants.	semesters) and the GEN ED	
		requirements. Subsequently, the CA completers numbers have been low. A Program Change	
		Proposal to remove the GEN ED requirements,	
		which are not required for CODA accreditation,	
		was submitted to the Curriculum Committee in	
		Fall 2018. The program also informed the	
		Commission on Dental Accreditation of the	
		changes and is awaiting approval from the system for the substantive changes.	
Information Technology	Students are dual- enrolled at UH West O'ahu and transfer	A new ABIT articulation agreement with UH	Continuation of program.
(APC)	prior to degree completion.	Maui College (includes	r . g
		APC units) was recently signed.	
		T	
		There will also be a new upcoming BA IT articulation agreement with the University of	
		Phoenix (will include APC	
		units).	
		We are developing a marketing strategy aimed at	
		current and past students.	
Culinary Arts (APC)	The program was housed in an interim facility which did not	CIP classroom facility was completed in 2017.	Continuation of program.
	support the full capacity/cohort of students. Due to the	Commender the description of the	
	strong economy, all of our two-year and APC students are highly valued and targeted by the food industry for	Currently, the department has engaged in a push for marketing the APC program. The Kap CC	
	mgmy various and targeted by the 1000 midustry 101	for marketing the Ar C program. The Kap CC	

employment. On a weekly basis, we receive multiple inquiries from culinary businesses about hiring our students. The additional training these Advanced Professional Certificate students obtain puts them in high demand. Our graduation numbers have been steady over the strong economic years which indicates the value students perceive of the APC pathway. Historically, Kap CC students contribute to the highest percentage of enrollment in this certificate. The program is currently focused on improved marketing of the Advanced Professional Certificate to our sister colleges. In addition, as the economy slows, our expectation is that the APC program becomes the first choice in advanced culinary training. Several of the Culinary APC courses also serve to fulfill requirements for the APC Hospitality pathway.	culinary faculty have set up an engagement taskforce to increase awareness of various programs including the APC. The Kap CC marketing coordinator has helped tremendously in marketing the APC program over social media, highlighting capstone projects within the APC courses. We have engaged our sister culinary programs in our advisory meetings and encouraged more collaboration utilizing CIP facilities in hopes of attracting new students from their campuses. We have also partnered with the food industry to promote the APC pathway including video segments with KHON's Take 2 and Living 808, and competitions with large corporate sponsors including 7-Eleven, Kings Hawaiian and Stella Artois. Through these avenues, we are attempting to make a	
	strong push to market our program.	

Kaua'i Community College Small Program Analysis 2017-2018

Small Program	Review	Actions Taken	Recommendation
Auto Body Repair & Painting  Certificate and Associate		Action was taken to terminate the program.	This program has been terminated.
Carpentry Technology (CARP)  Certificate and Associate	Industry demand is high and the program is important for meeting current workforce needs.	For increased efficiency and effectiveness, the program is being merged with the Electrical Installation and Maintenance Technology (EIMT) and the Facilities Engineering Technology (FENG) programs. Enrollment increases are anticipated through the merger of three programs and recruitment efforts with both industry and high schools (Construction Academy and Early College).	The program will be merged with Electrical Installation and Maintenance Technology (EIMT) and Facilities Engineering Technology (FENG) to form a Building Construction Technology program.
Electrical Install & Maint, Tech	See Carpentry Technology	See Carpentry Technology	Merge with Carpentry Technology (CARP)and

Certificate and Associate			Facilities Engineering Technology (FENG).
Business  Certificate and Associate	This provisional program has high demand with over four times the amount of new and replacement positions (county prorated 190) than there are current majors (42). The number of majors has been steadily increasing.	The program works closely with an advisory board to ensure industry relevance. With recruitment efforts at school career days, college fairs, professional organizations, and promotions at college and community events the number of majors, and consequently graduates, is expected to increase. The program is also exploring DE options.	Continuation of program.
Hospitality and Tourism  Certificate and Associate	Demand for this program is healthy but low unemployment rates are contributing to a decline in majors. However, the number of classes taught has increased in association with Early College demand.	Efforts to market to Early College high schools, industry partners, and the community at large continue. The program expects five Kaua'i High School certificate graduates in spring 2019. Additionally, the program has sought to renew its articulation agreement with UHWO.	Continuation of program.
Electronics Technology  Certificate and Associate	This program was created to meet the demand for technicians on Kaua'i with local employers still actively seeking program graduates and additionally soliciting Cyber training options.	The program is working to increase enrollment by reaching out to high tech employers currently sending staff to Oʻahu for training, increasing engineering courses offered via DE, and through involvement in high profile projects such as the IMUA project/the Hawaiʻi Space Grant Consortium.	Continuation of program.
Early Childhood Education  Certificate and Associate	Despite indicators showing this program's demand is cautionary, the college regularly receives solicitations for graduates and regular contact with local employers shows workforce demands are not being met.	The program increased the number of courses it can offer in DE format. Math 100 has been a barrier to completion so students are being encouraged to take math early and to utilize support services to increase on-time graduation.	Continuation of program.
Medical Assisting  Certificate	This program helps to meet a critical workforce need and boasts 100% job placement over the last two years. MAs are listed as a top five high demand occupation and one of the fastest growing healthcare workforce needs in Hawai'i with 377 unique state job postings in 2018.	The program has submitted a substantive change inquiry with ACCJC to deliver the program in a collaborative with UHMC. Lectures will be provided remotely by Kau CC and lab/clinicals will occur on Maui. Kau CC will be the home campus for program students and graduates. Additionally, Perkins funding is being sought to support this collaborative.	Continuation of program. The program will grow through a collaborative with UHMC (a merging of resources).

Accounting  Certificate	This program has a historically high demand for its graduates who fill a diversity of employer needs such as brokerage clerks, payroll clerks, statistical assistants, bookkeeping, accounting, auditing clerks, and tax and budgeting assistants. Additionally, 31 students transferred to UH 4-year institutions in the most recent five-year period.	The program has established an articulation agreement with UHWO, and with increased tutoring support for students, has improved course completion rates to an average of 74%, and persistence rates (fall to spring) have increased from 33% to 55%. The program created new brochures, revamped its website, increased interactions with professional partners, and is strengthening its high school connections.	Continuation of program.	
Hawaiian Studies Associate	Continuation of program.			
Natural Science Associate	This program serves to meet the demand for more STEM graduates and is part of a consortium of ASNS degrees for the UHCCs being presented to the board in movement from provisional to established.	There are several grant projects underway that aim to increase the number of STEM majors and graduates by exposing students to science opportunities, building confidence, and enhancing support for increased success. By having multiple science pathways housed under one degree, theoretically this is a type of merger for increased viability.	Continuation of program.	
Automotive Mechanics Technology Associate	This is a high demand program with NATEF certification. The program experienced a recent decrease in successful completion when changes in math design proved a barrier to student completion and success.  Measures are in place to help students successfully complete their math course and move to degree completion. Early warning indicators have improved collaboration between MATH and AMT faculty for increased student success.		Continuation of program.	
Culinary Arts Associate	This program also serves to meet a high demand workforce need. The program runs as a cohort of 20 students, and courses are completed sequentially in order to meet all required ACFEF accreditation competencies. However, some students stop out after earning a certificate of competency or achievement and may also obtain job placement prior to degree completion.	Faculty serve on the Integrated Student Success Committee and participate in initiatives to enroll students and assist with onboarding. For purposes of recruitment, faculty have outreach activities with Kaua'i High School for mentoring, conducting demonstrations, and engaging students with interest in the culinary arts.	Continuation of program.	

**Leeward Community College Small Program Analysis 2017-2018** 

Small Program	Review	Actions Taken	Recommendation
Business Technology (AS/CA)	The Business Technology program has met a specific need for skills training in support positions in an office setting. After a peak in 2011-2012, the number of majors and graduates has been on the decline. A large number of students leave the program after receiving the Certificate of Competence.	After a program review, the program curriculum for the AS and CA in Business Technology were revised in Fall 2018. The certificate was reduced from 33 credits to 31 credits to be effective fall 2019. The Cooperative Education course was moved from the CA to the AS in Business Technology as it is a capstone course. Revisions to the specializations in the AS in Business Technology were also made. The program is continuing to be reviewed for possible name change and other curriculum changes.	Continuation of program.
Digital Media Production (CA only)	The CA in Digital Media Production is a recent addition to the program. Since its addition, the numbers of certificates awarded has increased.	The auto-credentialing of certificates has been added for the CA in Digital Media Production. Several of the DMED courses in the CA were offered every other semester but are now consistently offered every semester. We expect the number of certificates awarded to continue to increase.	Continuation of program.
Management (CA only)	During the program review, it was determined the CA in Management had a course requirement that was not required for the AS degree. This course, MKT 130, had been added for stackable certificates created for the Western Association of Food Chains (WAFC) training program. Students earning the AS in Management were not eligible for the CA in Management unless they took this additional course.	The CA in Management curriculum has been modified to make MKT 130 optional and the CA was revised to 24 – 27 credits. Any student earning the AS in Management degree will now also be awarded the CA in Management. We expect the number of CA awardees will increase in the next few years.	Continuation of program.
Plant Biology & Tropical Agriculture (AS/CA)	The Plant Biology & Tropical Agriculture (PBT) Program started in Fall 2014. While there is strong demand from industry partners for the program, the number of majors and graduates have been low, though slowly increasing.	The PBT program is now included as part of the autocredentialing that has been in place for other programs. Program faculty will begin recruiting students from local high schools and advertising the program to current UH students interested in sustainability. A new Certificate of Competence in Aquaponics Technician was created which should attract students into the PBT degree program.	Continuation of program.

Small Program	Review	Actions Taken	Recommendation
Television Production (AS/CA)	The Television Production program has been identified as a program with a small number of graduates for several years due to its three-semester long cohort model. A review of the program shows that in addition to the small cohort size, the number of majors continues to decrease. Demand for TV Production graduates remains stable, but interest in the program seems to be waning.	The Television Production program used the past year to review what would be required to merge with the Digital Media Production program to ensure its long-term viability. The initial review has been completed, and plans for a merged curriculum are now under development. The merging of the two programs is planned within the next two years.  Additionally, the CA in TV Production has not been autocredentialed as in other programs. The auto-credential action was added for the CA in Television Production in 2018.	Plan to merge with Digital Media Production.

**UH Maui College Small Program Analysis 2017-2018** 

Small Program	Review	Actions Taken	Recommendation
Auto Body Repair and Maintenance (AAS)	Enrollment and graduation rates have been low for several years.	In the Process of stopping this program out. Not taking in new students. The UHMC Office of Continuing Education and Workforce Development is pursuing short term noncredit training to serve this industry.	Stop out program.
Fashion Technology (AAS)	This program has had historically low enrollments and graduation rates. For this reason, the viability of this program is now under consideration.	In the process of determining whether or not the program will be continued.	To be determined.
Agriculture and Natural Resources (AAS)	The enrollment is low due to a downtick in the local agriculture economy.	The program is partnering with Mahi Pono, the company that recently purchased 41,000 acres from Alexander and Baldwin, to train its workforce. Mahi Pono plans to establish GMO free diversified agriculture on Maui and anticipates hiring approximately 1,000 new workers.	Continuation of program.
Cultural and Natural Resource Management (AAT)	The Associate in Technical Studies (ATS) is a two-year Career and Technical Education (CTE) degree of at least 60 credits that provides students with skills and competencies for gainful employment. This program combines existing courses from existing CTE programs to help students meet very unique employment opportunities – such as Cultural and Natural Resources Management. This one way to meet local employment needs without the expenditures of a new CTE program. The enrollment in this program is always very low. However, the courses that support this program will have more robust enrollment, since those courses support other degree and certificate programs.	We are very careful when developing this program path for individual students to make sure there are employment opportunities upon completion of the program. We plan to continue with this practice.	Continuation of program.

Associate of Science in Natural Science (ASNS)	The ASNS program began in 2011 and remains a "provisional" program until deemed "permanent" in Spring 2019 – late due to a serious health issue with the program coordinator. It supports UHMC's and UHCC's commitment to increasing STEM graduation rates and transfer to baccalaureate STEM programs. We do not anticipate additional costs to continue the program, as ASNS program faculty and courses are part of the Liberal Arts AA program.	To improve degree completion rates, time is needed to fully establish and promote the program. UHMC plans to continue seeking federal and private grants to build capacity and enrollment in engineering (e.g., PEEC II). Such grants support curriculum development, recruitment of students, mentoring of students, and providing undergraduate research opportunities in STEM and the ASNS program. The ICT and Engineering paths were only established at UHMC in the past couple years, thereby allowing the college to offer all four ASNS paths.	Continuation of program.
Dental Hygiene (AS)	Dental Hygiene only admits a new cohort of students once every two years. Nearly 100 percent of the students admitted into the program graduate and are subsequently hired into high paying jobs as Dental Hygienists.	We have increased the number of students admitted into the program from 10 to 16 every two years.	Continuation of program.
Applied Business and Information Technology (BAS)	With 14 graduates last year, the graduation rate is improving. We anticipate that this trend will continue.	As was the plan when ABIT was granted established status, the program has been approved by WASC for statewide online delivery. Toward this end, UHMC and Kap CC recently signed an articulation agreement that we believe will bring 20 to 30 Kap CC students annually into the upper division of the ABIT program. We anticipate establishing other agreements with other community colleges in Hawai'i. This should result in a significant increase in the number of ABIT graduates.	Continuation of program.
Sustainable Science Management (BAS)	The SSM program has maintained strong enrollments for the past couple of years. Unfortunately, many of the students attend part time so time to graduate is more than four years. The program is close to meeting the ten student threshold but needs to do a better job moving students through to graduation. The program would also benefit from attracting more students.	The SSM program is beginning to develop its classes for distance delivery. Moving in this direction is a goal of the program and UH System. Since the program is unique in Hawai'i moving to a distance delivered program should increase the number of majors and graduates. Moreover, this would remove place and time challenges making it easier for current students to graduate.	Continuation of program.

## 2017-2018 Academic Program Actions Report Overview

Donald O. Straney
Vice President for Academic Planning and Policy
February 14, 2019 ASA Committee Presentation

## 2017-2018 Academic Program Actions Report Contents

- New programs approved by the Board
- Approvals to plan new programs
- Provisional programs granted Established status
- Programs continuing in Provisional status
- Programs terminated
- Programs reviewed
- Programs with a low number of degrees/certificates awarded per year (RP 5.229)
  - Less than 10 undergrad degrees/certificates of achievement (3-year avg.)
  - Less than 4 graduate degrees (5-year avg.)

## Summary of 2017-2018 Academic Actions

	2016-2017	2017-2018
New programs approved by the Board	4	1
Authorizations to plan new programs	11	6
Provisional programs to Established	15	6
Ongoing Provisional programs	45	38
Termination of programs	0	8
Program reviews completed	58	31

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## Summary of Programs Awarding Small Numbers of Degrees/Certificates

Campus	2016-2017	2017-2018
UH Mānoa	54	38
UH Hilo	15	15
UH West Oʻahu	0	0
Hawai'i CC	24	23
Honolulu CC	16	11
Kapi'olani CC	9	7
Kaua'i CC	22	13
Leeward CC	9	5
UH Maui College	27	8
Windward CC	0	0

## Types of Program Proposals

(September, 2018)

- Capital-intensive proposals
  - Require appropriation of new positions, operating funds and/or CIP funds
- Redirection or modernization proposals
  - May include new directions, but not new appropriations
  - Respond to student demand or national disciplinary trends
  - Generally entail reallocations, rebalancing and refocusing of unit academic programs and instructional resources
  - Can be delivered with revitalization or modernization of facilities
- Modifications of existing program proposals
  - May involve change in name or type of degree
  - Generally require minimal curricular changes or resource needs
- Rapid response to emerging state needs
  - Unanticipated program needs require rapid planning and implementation

## Integration of the APA Report into the Academic Master Plan

(coming in August, 2019)

### Unit Academic Master Plan Might Include—1

[Modelled on the 6-Year CIP Plan]

#### **Overview of Current Academic Programs**

- Summary of unit mission (IAFP, RP 4.201 mission statement)
- Existing academic programs
- Current programmatic strengths
- Recent program changes (additions and stop-outs)

#### 6-Year Academic Goals

- Unit academic priorities
- Economic, social, demographic needs to be addressed by program changes
- Projected enrollment trends and targets

#### Differentiate by type of program

- Programs requiring new capital investment (positions, funding, facilities)
- Programs established by reallocating existing resources attracting new students or requiring minor facilities changes
- Adjustments or changes made to current programs
- Programs to meet emerging needs requiring rapid response

## Unit Academic Master Plan Might Include--2

### 6-Year Academic Program Plan (annual update)

- Summary of current programs (provisional and established)
- New programs to be proposed in current year 1 (ATP approved by Officers)
  - Identify unit academic priorities motivating the program
  - Identify facilities, enrollment and budgetary impacts
  - Assess role of the program among system-wide degrees
- Provisional programs to be proposed for permanent status
  - Assessment of how well the outcomes proposed were met
  - Analyze unexpected outcomes
  - Does the program still meet the unit's academic priorities
- Programs to be phased out or merged or modified
- Programs due for proposals in years 2-3
  - Identify unit academic priorities motivating the program
  - Identify possible facilities, enrollment and budgetary impacts
- Possible programmatic initiatives to plan in years 4-6
- Summary of impacts of this year's proposals on facilities, enrollment and budget

2	UH Hilo - Academic Programs Approved by the Board	or negents	(us of Juneau y 2010)			
3	College/Department/Division and Degree Program	Approved Degrees	Approved ATPs	Future plans by College/Department/Division for the next 6 years: (indicate progam action and planned year, for new degrees, indicate ATP year)	Provisional Until	Program Review Dat
4	College of Agriculture, Forestry and Nat Resource Mgt					
5			BS in Aeronautical Sciences (ATP approved 2014; anticipated start Fall 2019)			
6	Agriculture	BS				2020
7	College of Arts and Sciences					
8	Humanities Division					
9	Art	BA				2021
10	Communication	BA				2017
11	English	BA				2021
12	Japanese Studies	BA				2017
13	Performing Arts	BA				2018
14	Philosophy	BA				2018
15	Natural Sciences Division					
16				BS in Data Science (anticipated ATP 2022; anticipated start 2023		
17	Astronomy	BS				2021
18	Biology	BS, BA				2017
19	Chemistry	BA				2020
20	Computer Science	BS				2021
21	Geology	BS, BA				2021
רכ	Marina Science	RC RA				2021
9	Nursing Practice	DNP				2019
0	Social Sciences Division					
1	Administration of Justice	BA				2020
2	Anthropology	BA				2020
3	Counseling Psychology	MA				
4	Education	MEd				2021
5	Teaching	MA				2021
6	Environmental Science	BS				2020
7	Environmental Studies*	BA		*Stopped out (Fall 2016-Spring 2020)		*Stopped o
8	Gender and Women's Studies	BA			Fall 2019	2020
9	Geography	BA				2017
0	Heritage Management	MA			Fall 2018	2020
1	History	BA				2022
2	Kinesiology and Exercise Sciences	BA				2019

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# Early College and Pathways to UH

University of Hawai'i Board of Regents Committee on Academic and Student Affairs

February 14, 2019



### What is Early College?

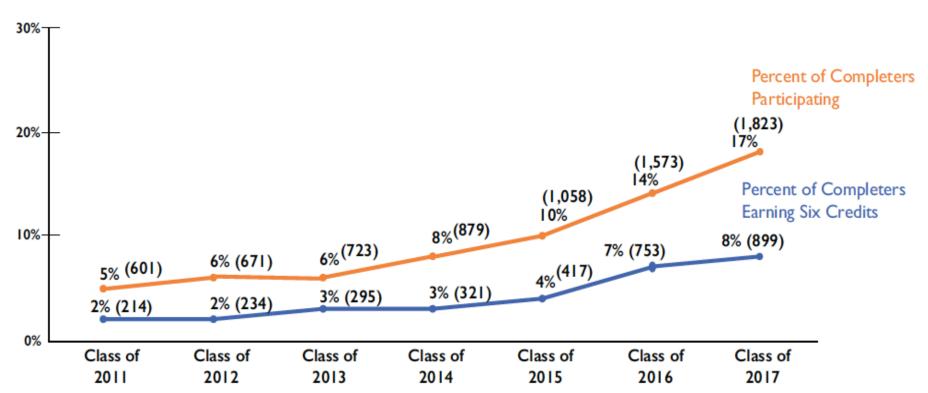
- A collaboration between the Hawai'i Department of Education and University of Hawai'i System
- A dual credit opportunity available to public high school students that provides them the opportunity to take college courses with their high school peers
- Courses mostly held on the high school campus
- Covered and enabled by HRS §302A-401 and HRS §304A-803





### More Students Participating in Dual Credit Opportunities

The percent of completers participating in dual credit and the percent earning at least six credits are steadily increasing.





# Positive Student Outcomes in Hawai'i

We have found a strong impact on:

- ↑ College enrollment (at a 2- or 4-year institution the Ist Fall after high school graduation)
- Completion of college-level English and math (within one year of high school graduation)
- Number of college credits accumulated (within one year of high school graduation)
- ↑ College Persistence (from I<sup>st</sup> to 2<sup>nd</sup> year)

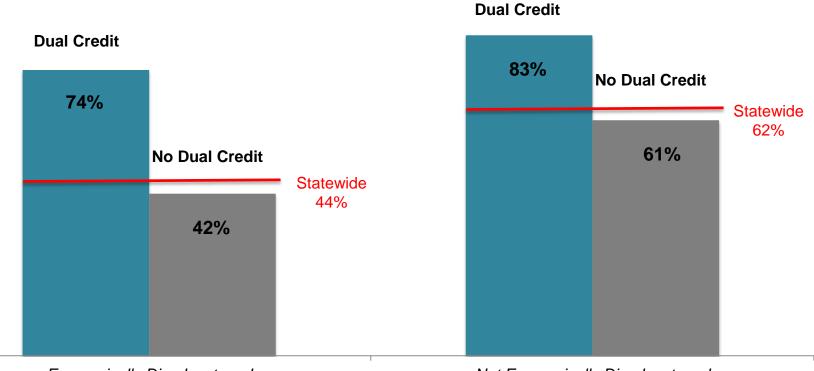




## **Economically Disadvantaged Graduates with Dual Credit Go to College at Higher Rates**

#### First Fall College Enrollment Rates for Classes of 2013-17

By Economic Disadvantage Status



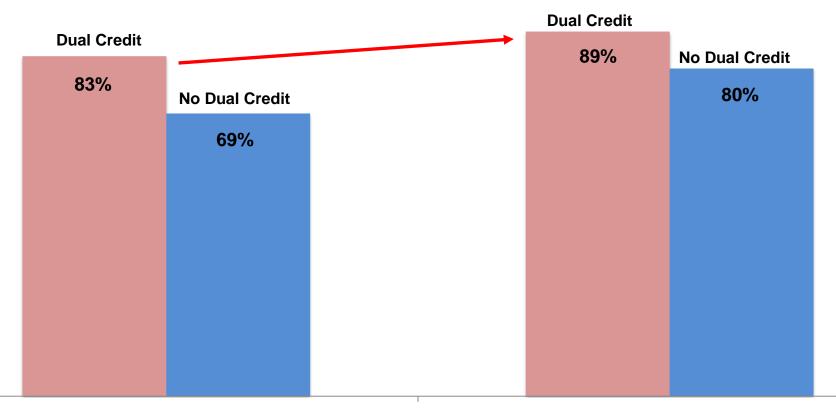




## **Economically Disadvantaged Graduates with Dual Credit Persist in College at Higher Rates**

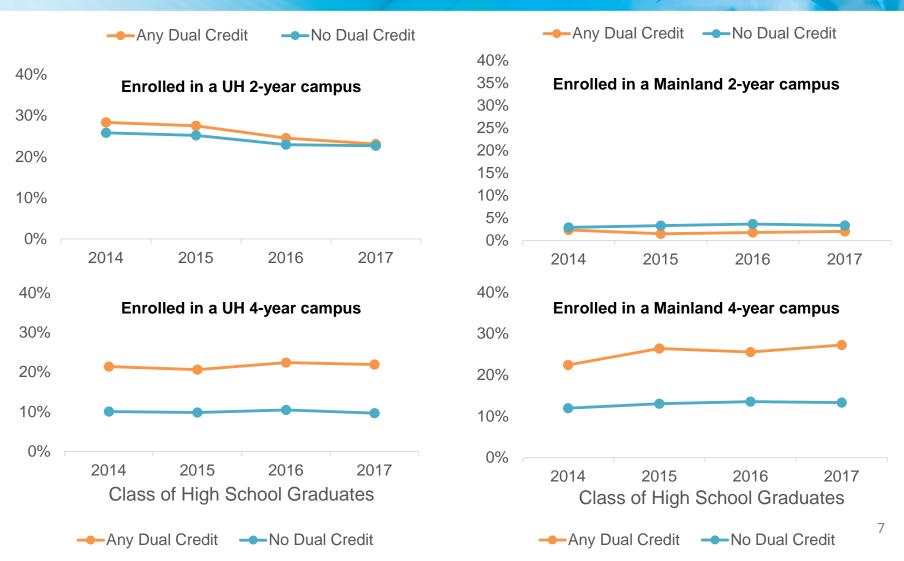
#### First to Second Year College Persistence Rates for Classes of 2013-17

By Economic Disadvantage Status





# More Dual Credit Students Enroll at UH (Compared to Non-Dual Credit Students)



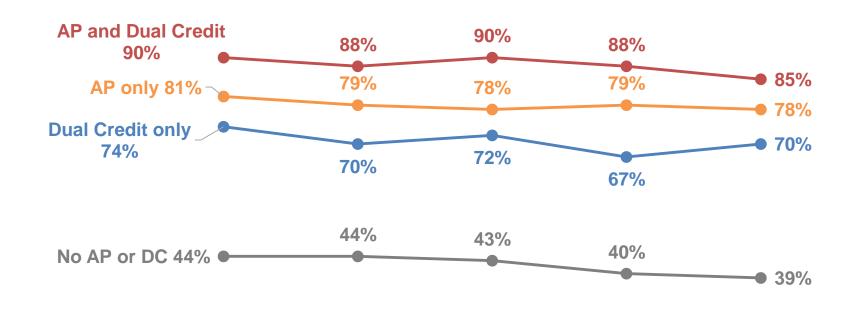


# More Dual Credit Students Enroll at UH (Compared to Non-Dual Credit Students)

Class of	HS Grads with NO Dual Credit	HS Grads with Dual Credits	# of DC Grads Enrolled in <b>UH</b> <b>2-Year</b> Campus	# of DC Grads Enrolled in <b>UH</b> <b>4-Year</b> Campus	# of DC Grads Enrolled in <b>Mainland 2-</b> <b>Year</b> Campus	# of DC Grads Enrolled in <b>Mainland 4-</b> <b>Year</b> Campus
2014	10,324	892	253	191	21	200
2015	9,866	1,061	292	219	16	280
2016	9,429	1,574	386	353	28	402
2017	9,064	1,823	421	400	37	497



## First Fall College Enrollment Rates of AP and Dual Credit Students

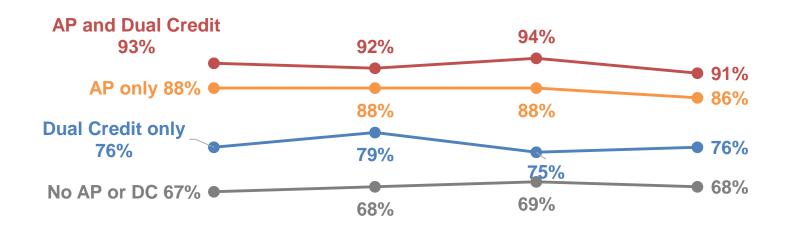


Class of '13 Class of '14 Class of '15 Class of '16 Class of '17

First Fall College Enrollment Rate



## College Persistence Rates of AP and Dual Credit Students



Class of '13 Class of '14 Class of '15 Class of '16

College Persistence Rate (First to Second Fall)



### Future of Early College/New Directions

- Increase college access and preparation for equity and opportunity: Attract and prepare high school students who may not otherwise go to college
  - Early College courses in career pathways
  - More Career and Technical Education courses
  - Target areas of workforce need
- Increase post-high school enrollment:
  - \$200 Momentum Scholarship for 2019 public HS grads
- Increase in participation:
  - \$1.5 M additional legislative funding requested by



## Other P-20 Efforts to Encourage Public High School Students to Attend College

- Cash for College FAFSA Campaign
- 6-16 Counseling Initiative
- My Future Hawai'i Application Portal

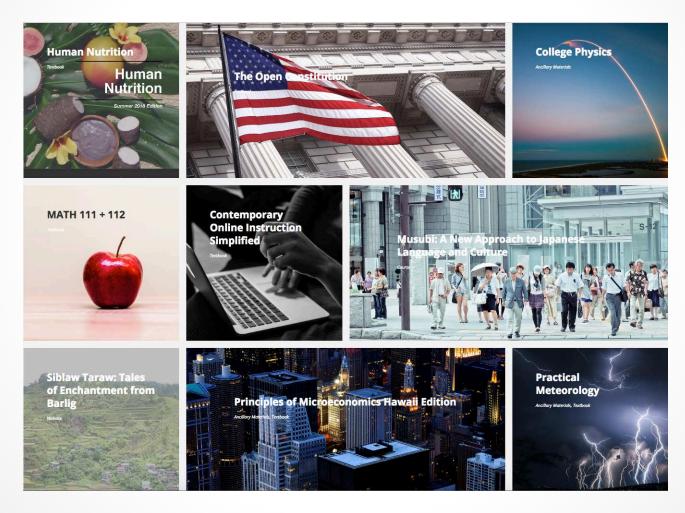
### "Zero Cost Textbook" Initiative

Hae Okimoto, PhD
Associate Vice President of Student Affairs &
Director of Academic Technologies
February 14, 2019

### **Definitions**

- Open Educational Resources
  - Adopt
  - Adapt
  - Author
- Library Resources
  - Online materials
  - Library reserves
- Zero Textbook Costs

## **UH OER Projects**



http://oer.hawaii.edu/projects/

### Goals for UH

- Undergraduate High enrolled Courses
- General Education Courses
- TXT0 designation in Banner

### Hawaiian Studies (HWST)

Gen. Ed./ Focus	CRN	Course	Section	Title	Credits					
DH,TXT0	33879	HWST 100	0	Intro to Hawaiian Culture	3					
Textbook Cost: \$0										
Recommended Preparation: HAW 101										
This HWST 100 class section (CRN 33879) is web-enhanced and requires students to have Internet accelerations are navigating basic computer operations. For additional information please contact the instructor via email										
This HWST 100 class section (CRN 33879) has a no show policy. Registration on or after the first day of FIRST WEEK OF CLASSES WILL BE AUTOMATICALLY DISENROLLED.										
DH,TXT0	33880	HWST 100	0	Intro to Hawaiian Culture	3					
Textbook Cost: \$	0									
Recommended Preparation: HAW 101										
This HWST 100 class section (CRN 33880) is web-enhanced and requires students to have Internet accelerating basic computer operations. For additional information please contact the instructor via email										

This HWST 100 class section (CRN 33880) has a no show policy. Registration on or after the first day of FIRST WEEK OF CLASSES WILL BE AUTOMATICALLY DISENROLLED.

DH,TXT0 34054 HWST 100 0 Intro to Hawaiian Culture 3

Textbook Cost: \$0

2/8/2019 • 4

## **Next Steps**

- BookSprint (www.booksprints.net)
  - Chem 161
  - Econ 130 & 131
  - Eng 100
- Course Sprints
  - Slide decks
  - Assessments

Phyl 141 & 142

Psy 100

Soc 100



Q & A

oer.hawaii.edu

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# University of Hawai'i - Online Degree Program Progress Report

University of Hawai'i Board of Regents
Academic and Student Affairs Committee
February 14, 2019

### Distance Learning -Progress Report



#### Prospective Students

What Is Distance Learning? What Programs Are Available? Is Distance Learning For Me? How Does It Work? What Services Are Available? How Do I Get Started?

#### **Current Students**

Book Ordering Financial Aid Libraries Registration Test Centers Tutoring

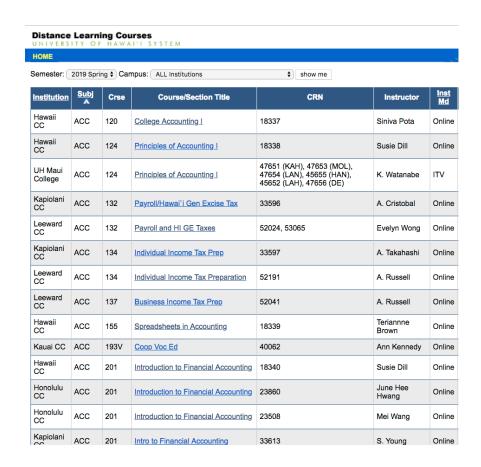
Courses

#### Faculty & Staff

What Is Distance Learning?
DL Programs and Certificates
DL Delivery Methods
Administrative Resources
Offering a Program?
Offering a Course?
Instructional Support
Resources
Library Services
Proctoring Services
Technology Resources

## Current Online Degree Programs

- Certificate Programs (13)
- Associate of Arts (3)
- Baccalaureate Programs (11)
- Graduate Certificate (3)
- Masters (3)
- Fall '18:
  - 1,337 courses
  - 32,099 registrations



https://www.hawaii.edu/dl/courses/?vw sort fld=subj

# UH System Hawai'i Graduation Initiative Priorities

2018-19 targeted milestones

#### First Year Success

Students complete Math and English in first year

Systemwide agreement and plan for "informed choice" of major (academic focus areas)

### Transfer

Students secure 4-year pathway early.

#### Online Education

Enrollment opens for online, 5-week AA for Fall 2019

Announcement of online, 5-week bachelors for Fall 2020

### **Returning Adults**

Student supports implemented for returning students

Campaign launched to enroll students with "some credit, no degree" in Fall 2019

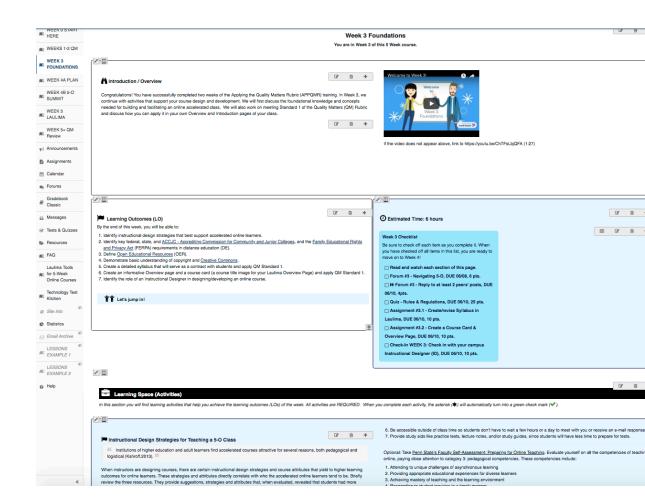
### Goals of UH Online

- 4 fully online programs provided in an accelerated format articulated across institutions, with robust online student support infrastructure (2 in fall 2019)
- Degree completion pathway based on 2 + 2 model
- Online student portal combining academic and student support
- Target audience: part-time working adult

## Faculty Development

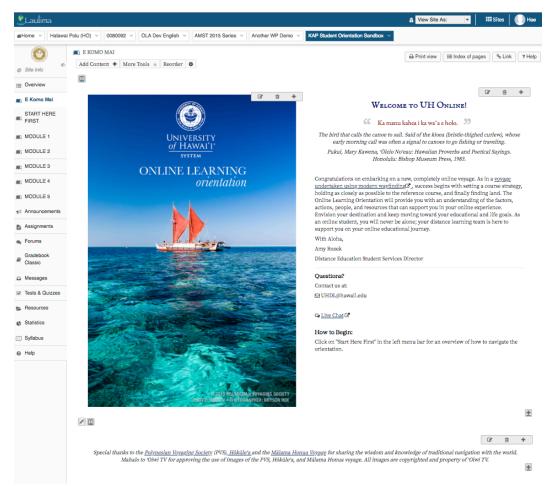
## 5-week program Redesign

- Research
- PedagogyUH QM approval



## Student Support Services

- Student Readiness
- Orientation
- Website



# Online AA Program Update

University of Hawai'i Board of Regents
Academic and Student Affairs Committee
February 14, 2019

# **UH Community Colleges' Online Program Objectives**

- 1. Reach market of Hawai'i residents who are not currently served by UH offerings (e.g., working residents, otherwise enrolling in other colleges' fully online programs, CC students transferring to online bachelors programs).
- 2. Develop fully online degree and certificate programs to meet state's workforce needs (e.g., CTE).
- 3. Provide **additional quality and flexible options** for current students.

### **UHCC** online programs

#### Associate in Arts

- Liberal Arts (Hawai'i, Honolulu, Kapi'olani, Leeward, Maui, Windward)
- Liberal Arts Accelerated 5 Week (Leeward)

#### Associate in Science

- Accounting (Leeward)
- Teaching (Leeward)

#### Bachelor of Applied Science

Applied Business and Information Technology (Maui)

#### Certificates

- Academic Subject Certificates: 5 (Leeward)
- Certificates of Achievement: 2 (Leeward)
- Certificates of Competence: 11 (Leeward), 1 (Windward)

# **UHCC Online Associate in Arts (AA) – Accelerated**

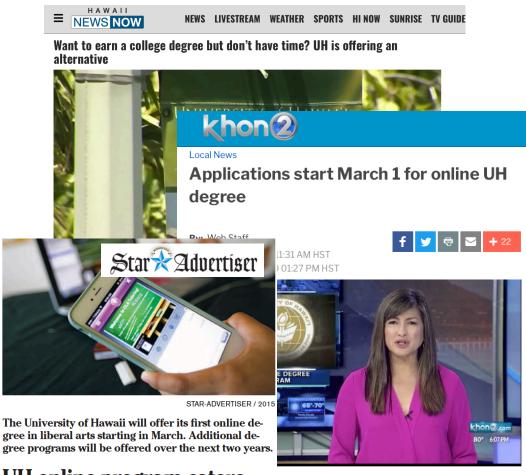
- Program designed for success
  - One, five week online course at a time
  - Year-round
  - Guaranteed courses to complete AA online
  - Cohort-based (first year)
  - Integrated student support
- First cohort begins Fall 2019
  - 40 students
  - Hosted by Leeward Community College
  - Courses offered by all 7 CCs
  - Target graduation date:
     December 2021



### January 13 announcement about online AA

More than 600 inquiries in ten days.

- Many with 30+ credits, attracted by 5-week classes.
- Received response within 48 hours.
- Referring to campuses for programs other than online AA.



UH online program caters to parents, full-time workers

By Kristen Consillio kconsillio@staradvertiser.com

Hawaii's residents want to earn a college degree but have many competing demands which make it diffi-

/aii will start a program for students to earn degrees classes this year.

- You can get your associates degree from the University of

### **Contact**

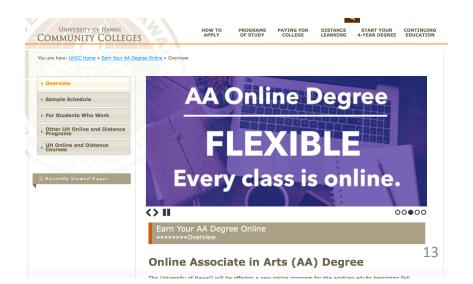
#### cconline@hawaii.edu

Tiana Loo, CC Online Student Support Coordinator tiana.loo@hawaii.edu (808) 455-0430

Tammi Chun, Office of VP for Community Colleges <a href="mailto:tammi.chun@hawaii.edu">tammi.chun@hawaii.edu</a> (808) 295-6960

#### For Information

uhonline.hawaii.edu
OR
uhcc.hawaii.edu/online



### Q & A

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