UNIVERSITY OF HAWAI'I
CODE REQUEST FORM FOR ACADEMIC PROGRAM CODES

REQUESTOR CONTACT INFORMATION	
Date: 19 April 2014	Effective term of request (Semester-Year): fall 2014
Name: Louise Pagotto	Title: Vice Chancellor for Academic Affairs
Campus: Kapi'olani Community College	Office/Department: Office of Academic Affairs
Phone: 808-734-9519	Email: pagotto@hawaii.edu

1. PROGRAM CODE, MAJOR CODE, CONCENTRATION CODE — Banner forms: SMAPRLE, SOACURR, STVMAJR

Institution: Kapiolani CC (KAP) | College: AR Arts & Sciences ✓ | Department: AR, Arts & Sciences ✓

☐ New program code ☐ Change/replace existing program code:

Level: ■ Undergraduate ☐ Graduate ☐ First-Professional ☐ Post-Baccalaureate ☐ Other:

Degree: Associate in Science ✓ AS | Certificate:

If requesting an existing Major code and/or Concentration code in Banner:

Existing Major: NSCI (Code) Natural Science ✓ (Description) Existing Concentration: CSCI (Code) Computer Science ✓ (Description)

If requesting a new ☐ Major code or ☐ Concentration code that does not exist in Banner:

New Code [4 char/space limit]: Description [30 char/space limit]:

If a similar major/concentration code exists in Banner, please list the code:

Is this major/concentration code being used the same way at other UH campuses? Leeward

Is 50% or greater of the classes in this program offered at a location other than the Home Campus? ☐ Yes ☑ No
(Please consult your Financial Aid Officer on Program Participation Agreement impact)

Is this program/major/certificate financial aid eligible? ☑ Yes ☐ No (Financial Aid Officer consultation required for all new program codes)

Should this program be available for applicants to select as their planned course of study on the online application? ☑ Yes ☐ No
(If yes, students may select the code as their only program of study.)

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Replacing or eliminating an existing program code:

If replacing an existing program code, are current students "grandfathered" under the old code? ☐ Yes ☐ No

Should the old program code be available for use in Banner? ☐ Yes ☐ No

Will the old program code be available for:

Banner Module	Yes	No	Ending Term (Semester-Year)
Online Application	☐	☐	
Recruitment	☐	☐	
Admissions	☐	☐	
General Student	☐	☐	
Academic History	☐	☐	

2. CERTIFICATES ONLY:

Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)? ☐ Yes ☐ No
(Please consult your Financial Aid Officer or see: http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html)

For new certificates approved by the Chancellor, the related BOR authorized academic program is:

3. NEW CAMPUS, COLLEGE, DIVISION, OR DEPARTMENT CODE Banner forms: STVCAMP, STVCOLL, STVDIVS, STVDEPT

Campus code [3 char]:	Campus description [30 char/space limit]:
College code [2 char]:	College description [30 char/space limit]:
Division code [4 char/space limit]:	Division description [30 char/space limit]:
Department code [4 char/space limit]:	Department description [30 char/space limit]:

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4. NEW COURSE SUBJECT CODE (Subject Alpha)	Banner form: STVSUBJ
College:	Department:
Subject code [4 char/space limit]:	Subject description [30 char/space limit]:

5. NEW MINOR (Minor codes are listed on the Major code table)	Banner form: STVMAJR
Minor Code [4 char/space limit]:	Minor Description [30 char/space limit]:

Please briefly describe your request and explain why you are requesting the code(s):

New concentration for the existing AS in Natural Science (The new concentration is similar to the concentration at Leeward CC)
Program length 2.0 years
Special program designation N

SUPPORTING DOCUMENTATION

Please see the **Code Request Guide** for the required supporting documents to be submitted. Documents submitted with this form:

- ☐ Board of Regents meeting minutes and supporting documents provided to the BOR
- ☐ Memo from UH President
- ■ Memo from Chancellor
- ■ Curriculum (required for requests for new programs/majors/minors/certificates)
- ☐ Gainful Employment Program notification to the US Department of Education
- ☐ Other: _____

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CAMPUS VERIFICATION		
Requestor Signature [signature]		Date 11/24/14
Registrar (If different from Requestor) J. Lorenzo Print name	[signature] Signature	11/24/14 Date
Email/memo in lieu of Registrar's signature may be attached		
Financial Aid Officer (Financial Aid Officer consultation required for all new program codes) Jennifer Bradley Print name	[signature] Signature	11/24/2014 Date
Email/memo in lieu of Financial Aid Officer's signature may be attached		
For Community Colleges, verification of consultation with OVPCC Academic Affairs: Suzette Robinson Print name	[signature] Signature	12/1/14 Date
Email/memo in lieu of signature may be attached		

Send completed form and supporting documentation to:

Institutional Research and Analysis Office (IRAO)
1633 Bachman Place
Sinclair Annex 2, Room 4
Honolulu, HI 96822

Email: iro-mail@lists.hawaii.edu
Fax: 808-956-9870
Phone: 808-956-7532

After <u>all</u> required forms and supporting documents have been submitted, please allow at least two weeks for processing by IRAO and Banner Central.

FOR INTERNAL USE ONLY	Date form/docs received: 12/8/14
Program code [12]: AS-NSCI-CSCI	Program Description [30]: AS-Natural Science-ComputerSci
CIP code [6]: ~~AS-Naturalr~~	CIP description [30]:

University of Hawai'i
KAPI'OLANI COMMUNITY COLLEGE
Instructional Services Office

MEMORANDUM

January 2, 2014

TO: Leon Richards
Chancellor

FROM: Louise Pagotto
Vice Chancellor

SUBJECT: AY 2014 Curricular Proposals – Program Action Request - Fall 2014

Enclosed are the following curricular documents for your review:

ACTION	**PROGRAM**
Modification	Associate in Science in Natural Science (AS NS): -Modification of AS NS Program Student Learning Outcomes -Addition of Pre-Computer Science concentration to the AS NS -Addition of SCI 295 (Alpha) as an elective to all concentration

Approved / Not Approved

1/2/14
Leon Richards, Chancellor Date

LP:lt

Attachments

c: Susan Pope
Chad Yasuda

KAPI'OLANI COMMUNITY COLLEGE
University of Hawai'i
PROGRAM ACTION REQUEST (Form: 1/07/07)

1a. Type of Program Action: Modification to the Associate in Science in Natural Science (AS NS)

1b. If modification of an existing program, what kind of modification?

Modification of Associate in Science degree in Natural Science (AS NS) Program Student Learning Outcomes; Addition of a Pre-~~Information and~~ Computer Science concentration to the Associate in Science degree in Natural Science; and Addition of SCI 295 (Alpha) as an elective to all concentrations.

1c. If new program, attach a program proposal for the Board of Regents, attach a copy of the "permission to plan" documents.

2. Program Type: Associate in Science degree in Natural Science (AS NS)

3. Program Name and Program Description: Associate in Science in Natural Science

The Associate in Science degree in Natural Science at Kapi'olani Community College prepares students to transfer to four-year institutions. This 60 credit program provides clear, explicit, coherent pathways for students intending to transfer into Science, Technology, Engineering and Mathematics (STEM) majors at baccalaureate institutions. The program provides curricula that focus on basic science and mathematics as well as more advanced research and mentoring experiences. The degree provides students with undergraduate research opportunities as they move through STEM curricular pathways. Targeted advising and appropriate course sequencing enable efficient transfer of STEM students.

4. Effective Term: Fall / 2014

5. Revise pages C138 – C191 in the 2013-2014 version of the KCC General Catalog.:

6. Is this program offered at another UH Campus? (please choose one, omit other) YES

If YES, specify campus, and program name. If NO, why is this program offered at KCC: The AS degree in Natural Science is currently being offered at Leeward Community College, Honolulu Community College, and Windward Community College.

7. Justification:

The proposed change in the AS NS degree Program SLOs is a result of the assessment done on the existing Program SLOs. It was concluded that the existing SLOs were vague, difficult to assess, which makes it difficult to determine how well the program is achieving its goals. The proposed addition to establish a new "Pre- ~~Information and~~ Computer Sciences" concentration is to provide a clear and focused pathway for students intending to pursue an Information and Computer Sciences degree at a four-year institution. Courses are currently being offered at KCC. The addition of the SCI 295 (alpha) course as an elective for the AS NS degree is for the credits earned by students to count towards the AS NS degree.

Delete "Information" to align with UHM BS degree

Requested by: Maria Bautista (Name) | Math & Sciences (Department) | 4 November 2013 (Date)

(Department Chairperson) | 1 Nov. 2013 (Date of Department Vote)

Approved by: (Dean of Arts and Sciences) | 11/8/13 (Date)

(Curriculum Chairperson) | 11/24/13 (Date)

(Faculty Senate Chairperson) | 12/2/13 (Date)

(Vice Chancellor for Academic Affairs) | 12/27/13 (Date)

(Chancellor) | 1/2/14 (Date)

Kapi'olani Community College
Action Request Memorandum
November 4, 2013

TO: Leon Richards, Chancellor, Kapi'olani Community College

VIA: Susan Dik, Faculty Senate Chairperson
Charles Sasaki, Dean of Arts and Sciences

FROM: Maria Bautista, Math & Sciences Department Chair

SUBJECT: Addition of a 60 credit concentration in Pre-Information and Computer Sciences to the Associate in Science degree in Natural Science (AS NS) at Kapi'olani Community College

1. SPECIFIC ACTION REQUESTED

Approval is requested for the following:
Create a new 60 credit concentration (Pre-Information and Computer Sciences concentration) in the Associate in Science degree in Natural Science.

Program Description: Associate in Science in Natural Science (AS NS)

The Associate in Science degree in Natural Science at Kapi'olani Community College prepares students to transfer to four-year institutions. This 60 credit program provides clear, explicit, coherent pathways for students intending to transfer into Science, Technology, Engineering and Mathematics (STEM) majors at baccalaureate institutions. The program provides curricula that focus on basic science and mathematics as well as more advanced research and mentoring experiences. The degree provides students with undergraduate research opportunities as they move through STEM curricular pathways. Targeted advising and appropriate course sequencing enable efficient transfer of STEM students.

Program Student Learning Outcomes:

Upon successful completion of the Associate in Science degree in Natural Science, the student should be able to:

- Apply scientific knowledge, skills, and methods to problem solving, with a special emphasis on Hawai'i, where appropriate.
- Utilize analytical reasoning or mathematical techniques to describe physical or biological phenomena.
- Conduct inquiry-based investigations using computer algorithms, engineering design reviews, and/or the scientific process.
- Critically review discipline-specific literature and effectively communicate unbiased research orally and in writing.

Computer Sciences

Pre-Computer Sciences

Proposed AS NS with a concentration in ~~Pre-Engineering,~~ curriculum to become effective Fall 2014						
ASSOCIATE IN SCIENCE CURRICULUM, NATURAL SCIENCE WITH A CONCENTRATION IN PRE-~~ENGINEERING~~ (60 CREDITS		* = Suggested Semester				
Course	Title	Credits	1	2	3	4
General Education Requirements (19 credits)						
ENG 100	Composition I	3	*			
MATH 205	Calculus I	4	*			
KCC AA/FG	AA Global and Multicultural Perspectives Electives (Two courses, each course from a different group: A, B, or C)	6			*	*
KCC AA/ DA, DL, DH	One course from DA, DL, DH	3	*			
KCC AA/ DS	One course from DS	3			*	
Chemistry Courses (8 credits)						
CHEM 161	General Chemistry I	3	*			
CHEM 161 L	General Chemistry I Lab	1	*			
CHEM 162	General Chemistry II	3		*		
CHEM 162 L	General Chemistry II Lab	1		*		
Information in Computer Sciences Concentration (19 credits)						
ICS 111	Introduction to Computer Science I	3		*		
ICS 141	Discrete Mathematics for Computer Science	3		*		
ICS 211	Introduction to Computer Science II	3			*	
ICS 212	Program Structure	3				*
ICS 241	Discrete Mathematics for Computer Science II	3			*	
PHYS 151	College Physics I	3		*		
PHYS 151 L	College Physics Lab I	1		*		
Electives (14 credits) ** indicates strongly recommended for this concentration						
ASTR 110	Survey of Astronomy	3				
BIOC 241	Fundamentals of Biochemistry	3				
BIOC 244	Essentials of Biochemistry	3				
BIOL 171	General Biology I	3				
BIOL 171 L	General Biology I Lab	1				
BIOL 172	General Biology II	3				
BIOL 172 L	General Biology II Lab	1				
BIOL 265	Ecology and Evolutionary Biology	3				
BIOL 265 L	Ecology and Evolutionary Biology Lab	1				

BIOL 275	Cell and Molecular Biology	3				
BIOL 275 L	Cell and Molecular Biology Lab	1				
BOT 201	Plant Evolutionary Diversity	3				
BOT 201 L	Plant Evolutionary Diversity Lab	1				
CHEM 272	Organic Chemistry I	3				
CHEM 272 L	Organic Chemistry I Lab	2				
CHEM 273	Organic Chemistry II	3				
CHNS101	Elementary Mandarin I	4				
CHNS102	Elementary Mandarin II	4				
CHNS201	Intermediate Mandarin I	4				
CHNS202	Intermediate Mandarin II	4				
EE 211	Basic Circuit Analysis	4				
EE 260	Introduction to Digital Design	4				
FIL101	Elementary Filipino I	4				
FIL102	Beginning Filipino I	4				
FIL201	Intermediate Mandarin I	4				
FIL202	Intermediate Mandarin II	4				
FR101	Elementary French I	4				
FR102	Elementary French II	4				
FR201	Intermediate French I	4				
FR202	Intermediate French II	4				
GG 101 L	Introduction to Geology Lab	1				
GG 103	Geology of the Hawaiian Islands	3				
HAW101	Elementary Hawaiian I	4				
HAW102	Elementary Hawaiian II	4				
HAW201	Intermediate Hawaiian I	4				
HAW202	Intermediate Hawaiian II	4				
ICS 101	Digital Tools for the Information World**	3				
ICS 110	Introduction to Object Oriented Visual Programming**	3				
JPNS101	Elementary Japanese I	4				
JPNS102	Elementary Japanese II	4				
JPNS201	Intermediate Japanese I	4				
JPNS202	Intermediate Japanese II	4				
KOR101	Elementary Korean I	4				
KOR102	Elementary Korean II	4				
KOR201	Intermediate Korean I	4				
KOR202	Intermediate Korean II	4				
MATH 100	Survey of Mathematics	3				
MATH 206	Calculus II**	4				
MATH 206 L	Calculus II Lab	1				
MICR 130	General Microbiology	3				
MICR 140	General Microbiology Lab	2				
MICR 161	Immunology and Protein Chemistry	2				

MICR 230	Molecular Biology	3				
MICR 240	Cell Biology and Tissue Culture	2				
OCN 201	Science of the Sea	3				
PHYL 160	The Science of Sleep	3				
PHYS 152	College Physics II**	3				
PHYS 152 L	College Physics II Lab**	1				
PHYS 170	General Physics I	4				
PHYS 170 L	General Physics I Lab	1				
PHYS 272	General Physics II	3				
PHYS 272 L	General Physics II Lab	1				
PHYS 274	General Physics III	3				
SCI 295	STEM Research Experience	variable				
SPAN101	Elementary Spanish I	4				
SPAN102	Elementary Spanish II	4				
SPAN201	Intermediate Spanish I	4				
SPAN202	Intermediate Spanish II	4				
ZOOL 141	Human Anatomy and Physiology I	3				
ZOOL 141 L	Human Anatomy and Physiology I Lab	1				
ZOOL 142	Human Anatomy and Physiology II	3				
ZOOL 142 L	Human Anatomy and Physiology IL Lab	1				
ZOOL 200	Marine Biology	3				
ZOOL 200 L	Marine Biology Lab	1				
TOTAL		**60**				

The issuance of an AS degree requires that the student must earn a cumulative grade point ratio (GPR) of 2.0 or higher for all courses applicable toward the degree.

2. RECOMMENDED EFFECTIVE DATE: Fall 2014

3. PURPOSE:

   The purpose of this new concentration in Pre-Information and Computer Sciences is to create a clear and focused pathway for students intending to pursue an Information and Computer Sciences degree at a four-year institution.

4. SPECIFIED ISSUES:

   The existing AS degree in Natural Science at KapCC has a Life Science concentration, a Physical Science concentration as well as a Pre-Engineering concentration. The addition of this new concentration will provide a focused pathway for students interested in pursuing a degree in Information and Computer Sciences. The required courses in the new concentration align with the curriculum check sheet for entry into the Information and Computer Sciences majors at UH Mānoa. All the 200 level courses in the Information and Computer Sciences curriculum check list of UH

Mānoa are currently being offered in the Business, Legal, and Technology Education Department at Kapi'olani Community College. Graduates of the AS degree in Natural Science with a concentration in Pre-Information and Computer Sciences will be on track to enter the College of Arts & Sciences in the Information and Computer Sciences Department at UH Mānoa with a junior status. It was also noted that many students in the Pre-engineering concentration intending to pursue an Electrical engineering degree may substitute many courses with Information and Computer Sciences courses; hence, this concentration may potentially support not only Information and Computer Science students but also existing Pre-engineering students.

5. BACKGROUND AND CONSEQUENCES:

The Associate in Science in Natural Science prepares students to transfer to four-year institutions. The current AS degree in Natural Science was created with a Life Science concentration, a Physical Science concentration, and a Pre-Engineering concentration. Currently pre-ICS students only have the AA degree as an option and therefore are not easily identifiable for tracking purposes. While this option will still be available for them in the future, the need to provide a clear pathway for students who intend to major in Information and Computer Sciences is present. This track will satisfy this need. Because all but one of the courses required for entry into one of the engineering majors at UH Mānoa with a junior status are currently being offered at KapCC, it is beneficial to establish a clear pathway for these students so that the "T" of STEM can now be represented and supported by a new and strong "pillar" degree. This new degree may also help increase the graduation rate at the College by providing a new pathway to Kapi'olani Community College students.

5. ACTION RECOMMENDED:

Approval of the establishment of the 60 credit Associate in Science degree in Natural Science with a concentration in Pre-~~Information~~ and Computer Sciences at Kapi'olani Community College effective Fall 2014.