

OK-Lawren

NEW OR MODIFY PROGRAM CODE

Form #CR-AP1
Modified June 2017

New Program Code **Modify Program Code**

Date: 11/24/2017

REQUESTOR CONTACT INFORMATION

Name Susan Kazama *Susan Kazama* Campus Kapi'olani CC
 Title Interim Vice Chancellor for Academic Affairs Email smurata@hawaii.edu
 Office/Dept Academic Affairs Phone 808-734-9519

NEW PROGRAM CODE TO CREATE

Institution KAP - Kapiolani Community College Campus KAP - Kapiolani Community College
 Level UG - Undergraduate Effective Term fall 2018, Banner 201910

	Code (Max. Characters)	Description	Check if requesting new code:
College	(2) <u>AS AR</u>	<u>Arts & Sciences</u>	<input type="checkbox"/> See Banner form STVCOLL
Department	(4) <u>AS AR</u>	<u>Arts & Sciences</u>	<input type="checkbox"/> See Banner form STVDEPT
Degree/Certificate	(6) <u>CO</u>	<u>Certificate of Competence</u>	<input type="checkbox"/> See Banner form STVDEGC
Major	(4) <u>NSCI</u>	<u>Natural Science</u>	<input type="checkbox"/> See Banner form STVMAJR
Concentration	(4) <u>BIOT BITG</u>	<u>Biotechnician- Biotechnology</u>	<input checked="" type="checkbox"/> See Banner form STVMAJR
Minor	(4) _____	_____	<input type="checkbox"/> See Banner form STVMAJR

If a similar major/concentration code exists in Banner, please list the code: _____
 Justification to warrant a new major/concentration code similar to an existing major/concentration code: _____

Is this major/concentration code being used the same way at the other UH campuses? Yes No
 Should this program be available for applicants to select as their planned course of study on the online application? *If yes, student may select the code as their only program of study.* Yes No

RULES PERTAINING TO FINANCIAL AID AND 150% DIRECT SUBSIDIZED LOAN LIMIT LEGISLATION

Is 50% or greater of the classes in this program offered at a location other than the Home Campus? Yes No
 Is this program/major/certificate financial aid eligible? Yes No
 Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)? Yes No

See <http://www.itap.ed.gov/GainfulEmploymentInfo/index.html>

Program Length
In academic years decimals are acceptable. The length of the program should match what is published by the campus in any online and/or written publication. 1.0

Special Program Designations
 See *Special Program Designations Code Definitions on IRAO Program Code Request webpage*

Required Terms of Enrollment: Fall Spring Summer Extended

IRAO USE ONLY: DATE RECEIVED

ADDITIONAL COMMENTS

ATTACHMENTS

BOR Approved: Sole-credential Certificates, Associate (excluding ATS), Bachelor and Graduate Degrees, and sole credential certificates

- BOR Meeting Minutes & Supporting Documents Curriculum

Chancellor Approved: Concentrations, Certificates and Associate in Technical Studies (ATS) Degree

- Memo from Chancellor to notify Vice President for Academic Planning and Policy regarding program action.
 Curriculum

CERTIFICATES ONLY: Please check one (1) statement. This certificate is a...

- BOR approved certificate. BOR Meeting/Approval Date: _____
 Chancellor approved within an authorized BOR program. BOR Program: A.S. in Natural Sciences
 Chancellor approved CO in accordance with UHCCP 5.203, Section IV.B.10.

VERIFICATIONS

By signing below, I verify that I have reviewed and confirm the above information that is pertinent to my position.

Registrar
(Print Name)

Jerilynn Enokawa

Jerilynn Enokawa 12/28/17
Signature Date

Financial Aid Officer
(Print Name)

Jennifer Bradley

Jennifer Bradley 01/02/2018
Signature Date

For Community Colleges,
verification of consultation with
OVPC Academic Affairs:

Tammi Oyadomari-Chun

Tammi Oyadomari-Chun 9/20/18
Signature Date



UNIVERSITY of HAWAII
KAPI'OLANI
COMMUNITY COLLEGE

MEMORANDUM

January 17, 2018

TO: Donald Straney
Vice President for Academic Planning & Policy

FROM: Louise Pagotto *Louise Pagotto*
Interim Chancellor, Kapi'olani Community College

SUBJECT: Program Code Request for the new Certificate of Competence in
Biotechnology at Kapi'olani Community College

Kapi'olani Community College is submitting a program code request for the new Certificate of Competence in Biotechnology under the Associate in Science degree in Natural Sciences, to become effective in fall 2018. The proposed new code is CO-NSCI-BITG.

CO-NSCI-BITG | Certificate of Competence in Biotechnology

Future | Fall 2018 – Indefinite

BANNER CODE FOR PROGRAM
CO-NSCI-BITG

BANNER TITLE FOR PROGRAM
Certificate of Competence in Biotechnology

CIP CODE FOR PROGRAM

A.) General Catalog Information ('Ike Mo'ohewa'awina)

A.1) PROGRAM TITLE (PO'O PAPA'AHANA)
Certificate of Competence in Biotechnology

A.2) PROGRAM LEVEL TYPE (KŪLANA PAPA'AHANA)
Certificate

A.3) DEGREE TYPE ('ANO O KE KŪKELÉ)
Certificate of Competence

A.4) PROGRAM DESCRIPTION FOR CATALOG (HULIKO'A PAPA NO KA MO'OHA'AWINA)
The Certificate of Competence in Biotechnology prepares students for entry level work in laboratories specializing in microbiology, molecular biology, cell biology and immunology. The curriculum offers a strong theoretical foundation in biotechnology and extensive opportunities for honing the laboratory skills needed to work in biotech laboratories. This certificate is particularly suited as a supplemental credential for students in the Medical Laboratory Technician program.

A.5) CAREER OPTIONS FOR CATALOG (NĀ KOHO 'OIHANA NO KA MO'OHA'AWINA)
Entry level employment in research labs and in commercial biotechnology laboratories and production facilities. Employment in laboratories utilizing molecular diagnostics.

A.6) CATALOG GRID
• [aaa real Biotech COMatrix for Students.doc](#)

A.7) CURRICULUM GRID COMMENTS (MANA'O KŪ PAPA HA'AWINA)
The Issuance of a Certificate of Competence requires that the student must earn a cumulative grade point ratio (GPR) of 2.0 or higher for all courses applicable toward the certificate.
Please note: For the Certificate of Competence in Biotechnology, a grade of "C" or higher must be maintained in all required courses.

A.8) MISSION STATEMENT (ALA NU'UKIA)

A.9) PROGRAM ACCREDITATION INFORMATION ('IKÉPILI HUI 'ĀPONO POLOKALAMU)

A.10) APPLICATION PERIOD TO BE LISTED IN THE CATALOG

B.) Program Learning Outcomes

B.1) PROGRAM LEARNING OUTCOMES (PAPA'AHANA KŪLE'A'LIKE)

CO - Biotechnology - Demonstrate competence in performing fundamental laboratory procedures and protocols common to biotechnology research and development in the fields of molecular biology, microbiology, cell biology, biochemistry and immunology.

LINKED COURSE OUTCOMES

--- None ---

CO - Biotechnology - Apply the scientific method to experiment and conduct research logically and safely following all safety, operational and record keeping protocols and apply knowledge to formulate and test hypotheses and analyze results and troubleshoot problems as well as to anticipate biological, chemical and other hazards.

LINKED COURSE OUTCOMES

None

CO - Biotechnology - Analyze, research, and synthesize laboratory and published data using appropriate bioinformatics computational tools and software, and report results in standard scientific formats such as poster, oral and written presentations.

LINKED COURSE OUTCOMES

--- None ---

C.) Program Requirements

C.1) PROGRAM ENTRANCE REQUIREMENTS/PREREQUISITES (KOINA KOMO)

First Semester

7

- Earned a minimum grade of C in each of the following
 - MICR 130 - General Microbiology (3)
 - MICR 140 - General Microbiology Lab (2)
 - MICR 161 - Immunology and Protein Chemistry (2)

Second Semester

5

- Earned a minimum grade of C in each of the following
 - MICR 230 - Molecular Biology (3)
 - MICR 240 - Cell Biology and Tissue Culture (2)

Grand Total Credits: 12

C.2) SATISFACTORY PROGRESS REQUIREMENTS (KOINA HOLOMUA KŪPONO)

The minimum required GPR will be set as 2.0 (C) and the minimum acceptable grade will be set as 2.0 (C).

No Rules

C.3) PROGRAM COMPLETION REQUIREMENTS (KOINA PAPAĀHANA HO'OPAU)

A minimum of 12 credits from the first and second semester sequence of required courses with a grade of "C" or higher

No Rules

C.4) STAR GPS REGISTRATION PRIORITY LIST

- STAR GPS REGISTRATION PRIORITY.doc

D.) BOR Information Pre-Fall 2016 ('Ike Pili Papa o NĀ Kahu Kula)

D.1) PROGRAM JUSTIFICATION (HO'ĀPONO PAPAĀHANA)

D.2) PROGRAM MISSION AND OBJECTIVES (PAPAĀHANA ALA NU'UKIA ME KA PAHUHOPU HĀIKU)

D.3) PROGRAM CURRICULUM PLAN (MO'OHA'AWINA)

D.4) PROGRAM TARGET GROUP (NA WAI E KOMO)

D.5) PROGRAM RESOURCES (PONO PAPAĀHANA)

D.6) PROGRAM EFFICIENCY (PAPAĀHANA HOLO PONO)

D.7) PROGRAM EFFECTIVENESS (PAPAĀHANA KŪLE'A)

D.8) ATTACH A BOR SUBMISSION HERE

D.9) ATTACH A MEMO CONFIRMING BOR APPROVAL HERE

E.) New Academic Programs Fall 2016 and Later

E.1) PROGRAM PURPOSE AND OUTCOMES

E.1a) DESCRIBE THE PURPOSE OF THE PROPOSED PROGRAM IN TERMS OF MEETING STUDENT, COMMUNITY OR STATE NEEDS

E.1b) IDENTIFY THE PROGRAM OUTCOMES, WHAT THE STUDENT WILL KNOW AND BE ABLE TO DO AT THE COMPLETION OF THE PROGRAM.

E.1c) DESCRIBE THE FIT OF THE PROPOSED PROGRAM WITH SYSTEM/CAMPUS MISSION AND STATE NEED.

E.2) PROGRAM ORGANIZATION

E.2a) PROVIDES A DESCRIPTION OF CURRICULUM ORGANIZATION, TOTAL CREDITS TO COMPLETE THE PROGRAM INCLUDING ALL PREREQUISITE REQUIREMENTS, ADMISSION POLICIES, ADVISING, AND OTHER ASPECTS OF THE PROGRAM, WITH REFERENCE TO ITS GOALS/OUTCOMES.

E.2b) INCLUDES AN ACADEMIC MAP FOR CERTIFICATE OF ACHIEVEMENT, ASSOCIATE AND BACHELOR DEGREES THAT DEMONSTRATES ON TIME COMPLETION

E.2c) PROVIDES JUSTIFICATION FOR A PROGRAM THAT IS MORE THAN 30 CREDITS FOR A CERTIFICATE OF ACHIEVEMENT OR 60 CREDITS FOR AN ASSOCIATE DEGREE OR 120 CREDITS FOR A BACHELOR'S DEGREE.

E.2d) DESCRIBES PROVISIONS FOR ARTICULATION WITH UH COMMUNITY COLLEGE DEGREES FOR BACHELOR'S DEGREES.

E.3) STUDENT DEMAND

E.3a) DESCRIBES THE PROFILE OF STUDENTS WHO WILL LIKELY ENROLL IN THE PROGRAM AND INCLUDES A DISCUSSION ON THE LIKELIHOOD OF THE PROGRAM ATTRACTING NEW STUDENTS TO THE CAMPUS OR EXISTING STUDENTS.

E.3b) PROVIDES EVIDENCE OF STUDENT INTEREST (I.E. NEEDS ASSESSMENT).

E.3c) INCLUDES AN ESTIMATE NUMBER OF MAJORS PER YEAR WITH AN EXPLANATION ON HOW THIS NUMBER WAS DETERMINED.

E.4) PROGRAM RESOURCES AND EFFICIENCY

E.4a) DESCRIBE RESOURCES REQUIRED FOR PROGRAM IMPLEMENTATION AND FIRST CYCLE OPERATION.

E.4b) DESCRIBE THE EXPECTED SOURCES OF FUNDS, INCLUDING SOURCES OF REALLOCATED FUNDS.

E.4c) COMPARE ANTICIPATED COST PER \$5H, COST PER MAJOR, \$5H/FACULTY, AVERAGE CLASS SIZE OR OTHER QUANTITATIVE MEASURE WITH OTHER PROGRAMS IN THE COLLEGE AND SIMILAR PROGRAMS ON OTHER UH CAMPUSES.

E.4d) LIST SIMILAR PROGRAMS AT OTHER UH CAMPUSES AND DESCRIBE HOW THE PROPOSED PROGRAM DIFFERS OR IS SIMILAR TO THESE PROGRAMS. PROVIDE THE RATIONALE FOR THE NEW PROGRAM IF A SIMILAR PROGRAM OR PROGRAMS EXIST.

E.5a) DESCRIBE THE PLAN FOR ASSESSING THE QUALITY OF STUDENT LEARNING.

E.5b) IDENTIFY RELEVANT PROGRAM ACCREDITATION AND PLANS TO MEET ACCREDITATION REQUIREMENTS.

E.6) ATTACH A COMPLETED DOCUMENT WITH ALL OF THE INFORMATION FROM 1-5 ABOVE NOTE THAT THE PAGE LIMIT IS 15 PAGES.

F. Attachments (P&ku'ina)

F.1) ATTACH MEMO OR OTHER DOCUMENT(S) FROM ACCREDITING BODY HERE (IF APPLICABLE).

F.2) ATTACH MISCELLANEOUS DOCUMENT(S) HERE.

- asa attachment part F Certificate of Competence In Biotechnology.docx

G.) Academic Affairs

G.1) INITIAL CODE REQUEST TO IRAQ

G.2) COPY OF THE MEMO FROM THE CHANCELLOR TO THE THE UN SYSTEM VPAA

G.3) PREVIOUS VERSIONS OF THE PROGRAM

H.) Instructions

CERTIFICATE OF COMPETENCE CURRICULUM		• =Suggested Semester		
Biotechnology				
(12 CREDITS)				
Course	Title	Credits	1	2
Microbiology Courses (12 credits)				
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		*
TOTAL		12		
<i>Please note: To fulfill the requirements for the certificate, a grade of "C" or higher is required in all applicable Microbiology courses.</i>				

Certificate of Competence in Biotechnology

Prioritized List For STAR GPS - Please list most efficient way for the students to achieve the degree (Make certain that any prerequisite courses are listed before the courses that have prerequisites.)

1. MICR 130
2. MICR 140
3. MICR 161
4. MICR 230
5. MICR 240

The Certificate of Competence in Biotechnology prepares students for entry-level work in laboratories doing biomolecular science. These would be biotechnology industry labs, medical diagnostic labs and research labs specializing in microbiology, molecular biology, cell biology and immunology. The curriculum proposed here offers a strong theoretical foundation in biotechnology and extensive laboratory training opportunities for honing the skills needed to work in such laboratories. This certificate is particularly suited as a supplemental credential for students in the Medical Laboratory Technician program at Kapiolani Community College, offering them skills necessary for the new field of molecular diagnostic laboratory medicine.

By completing the course series described in this certificate proposal, students will have mastered the theory and practice of a set of laboratory skills valuable in biotechnology and medical laboratories. A credential acknowledging this would provide students with a certification with which to gain employment in such labs. Such a credential would be of particular benefit to students enrolled in the Medical Laboratory Technician Program. It would also be valuable for currently employed medical laboratory workers seeking continuing education in molecular laboratory diagnostic medicine, a new and growing field. The credential would also be useful for ASNS transfer students who might seek employment in biotechnology research as part of their educational track while pursuing a BS degree.