

**New Program Code**     **Modify Program Code**

Date: 1/23/2020

**REQUESTOR CONTACT INFORMATION**

Name Shelby Wong Campus Hilo, UH  
 Title Curriculum, Catalog, Grad Div Spec. Email shelbyw@hawaii.edu  
 Office/Dept OVCAA Phone 932-7927

**NEW PROGRAM CODE TO CREATE**

Institution HIL - University of Hawaii at Hilo Campus HIL - University of Hawaii at Hilo  
 Level UG - Undergraduate Effective Term Fall 2020

	Code (Max. Characters)	Description	Check if requesting new code:
College	(2) <u>AG</u>	<u>Agriculture, Forestry, Nat Res</u>	<input type="checkbox"/> See Banner form STV_COLL
Department	(4) _____	_____	<input type="checkbox"/> See Banner form STV_DEPT
Degree/Certificate	(6) <u>BS</u>	<u>Bachelor of Science</u>	<input type="checkbox"/> See Banner form STV_DEGC
Major	(4) <u>AG4</u>	<u>Agriculture</u>	<input type="checkbox"/> See Banner form STV_MAJR
Concentration	(4) <u>ANHM</u>	<u>Animal Health &amp; Management</u>	<input checked="" type="checkbox"/> See Banner form STV_MAJR
Minor	(4) _____	_____	<input type="checkbox"/> See Banner form STV_MAJR

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: \_\_\_\_\_

If new major, please list the BOR's approved Classification of Instructional Programs (CIP) 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?  Yes  No  
*If yes, student may select the code as their only program of study.*

**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.ifap.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.*

4 YEARS

**Special Program Designations**

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

A     B     N     P     T     U

Required Terms of Enrollment:  Fall     Spring     Summer     Extended

**IRAO USE ONLY: DATE RECEIVED**

**ADDITIONAL COMMENTS (for modifying existing program codes, specify the term to turn on/off the online application, the recruitment/admission term, and the general student/history/degree term.)**

New program concentration on the BS-AG4. The Animal Health & Management Concentration will replace the Animal Science PreVet (VET) and Animal Science Livestock Production (ANS) concentrations.

*Need to Submit Stop out forms for VET & ANS*

**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: \_\_\_\_\_  
 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)

Chelsea Kay-Wong

*CK Wong* 2/28/2020  
Signature Date

Financial Aid Officer  
(Print Name)

Sherrie Padilla

*SPadilla* 3/3/20  
Signature Date

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

Tammi Oyadomari-Chun

Signature Date



2020 JAN 30 PM 2: 13

UH-HILO  
CHANCELLOR'S OFFICE

January 30, 2020

**MEMORANDUM**

**TO:** Bonnie Irwin  
Chancellor  
University of Hawai'i at Hilo

**FROM:** Ken Hon *Ken Hon*  
Interim Vice Chancellor for Academic Affairs  
University of Hawai'i at Hilo

**SUBJECT:** Request for Approval of New Program Codes for use at UH Hilo

**SPECIFIC ACTION REQUESTED:**

We request that the following new program codes be approved for use. The below are either modifications to existing Bachelor degree programs or new Subject Certificates approved for Fall 2020 via the campus curriculum review process.

Program Modifications for Bachelor Degrees:

BS-AG4-ANHM Bachelor of Science  
Agriculture  
Animal Health and Management Concentration  
College of Agriculture, Forestry and Natural Resource Mgmt.

\*CAFNRM is combining the current two Animal Science concentrations into one revised concentration.

BS-AG4-TAG Bachelor of Science  
Agriculture  
Tropical Agroecology Concentration  
College of Agriculture, Forestry and Natural Resource Mgmt.

\*CAFNRM is combining the current Tropical Plant Science and Agroecology and Tropical Horticulture concentrations into concentration.

BBA-GBUS-AECO Bachelor of Business Administration  
General Business  
Applied Economics Concentration  
College of Business and Economics

\*The current Economics concentration is being renamed to Applied Economics to better reflect content.

BA-HIST-HAP      Bachelor of Arts  
History  
Hawai'i and the Pacific Concentration  
College of Arts and Sciences

\*History is combining its current Hawai'i and Pacific History concentrations to a combined concentration.

BA-KES-AKES      Bachelor of Arts  
Kinesiology and Exercise Science  
Applied Kinesiology and Exercise Science Concentration  
College of Natural and Health Sciences

BA-KES-AHLT      Bachelor of Arts  
Kinesiology and Exercise Science  
Allied Health Concentration  
College of Natural and Health Sciences

\*KES is revamping program curriculum and is renaming two of its existing concentrations to better reflect content.

New Subject Certificates under a BOR approved degree program:

SC-ART-DMA      Digital Media Art  
Home Program: BA- Art

SC-JPST-JPT      Japanese Language Teaching  
Home Program: BA- Japanese Studies

SC-KES-IPH      Indigenous Public Health  
Home Program: BA- Kinesiology and Exercise Science

**RECOMMENDED EFFECTIVE DATE:**

We request the effective date of Fall 2020.

**ADDITIONAL COST:**

There is no additional cost associated with this request.

**PURPOSE:**

The purpose of this request is to request approval for new program codes from the UH System Institutional Research, Analysis and Planning (IRAPO) office for the above-mentioned degree programs and subject certificates.

**ACTION RECOMMENDED:**

We recommend that you approve the new program codes for use for the above-mentioned degree and certificate programs.

**APPROVED/DISAPPROVED:**

  
\_\_\_\_\_  
Bonnie Irwin, Chancellor

1-31-20  
Date

KH:sw

Cc: Donald Straney, Vice President for Academic Planning & Policy  
Chelsea Kay-Wong, University Registrar and Interim Director of Admissions

# Code Agriculture, BS: Animal Health and Management Specialty

Approved | Fall 2020

## Proposal Information

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### Workflow Status

#### Proposer

- ✓ **Lissa Tsutsumi (Submitter)**  
Submitted 10-1-2019

#### (Curriculum Coordinator) \\ Curriculum Coordinator

- ✓ **Shelby Wong**  
Approved 10-3-2019  
Curriculum Office and Registrar Reviewed
  - Cheri Kelii-Marumoto

#### Department (Agriculture- CAFNRM) \\ Department Chair

#### College (CAFNRM) \\ College Curriculum Review Committee Chair

- ✓ **Kevin D Hopkins**  
Approved 10-7-2019

#### College (CAFNRM) \\ Senate Chair

- ✓ **Lorna Tsutsumi**  
Approved 10-7-2019

#### College (CAFNRM) \\ Associate Dean

#### College (CAFNRM) \\ Dean

- ✓ **Bruce Mathews**  
Approved 10-7-2019

#### (CCRC) \\ CCRC Chair

- ✓ **Alexander Nagurney**  
Approved 10-9-2019

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(VCAA) \\ VCAA

- ✓ **Kenneth Hon**  
Approved 12-11-2019
- 

(Curr Coord Final) \\ Curriculum Coordinator

- ✓ **Shelby Wong**  
Approved 1-10-2020
- Printed and Included in Binder
- VCAA Student Assistant
  - Cheri Kelii-Marumoto
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#### Program Title

Agriculture, BS: Animal Health and Management Specialty

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## Admin Use Only

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Code

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## P) Proposal Details

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#### P.1) This is a proposal for:

Modification of an existing undergraduate or graduate program, degree, minor, or certificate

#### P.2) Proposal Summary

Previously, Agriculture, BS: Animal Science had two separate specialties - Pre-Vet and Livestock Production. The proposed changes are to merge the two specialty tracks into one under the name Animal Health and Management.

#### P.3) Proposal Rationale/Justification

The changes will not impact the curriculum or students. This change is being proposed as the enrollment numbers for the animal science tracks are calculated separately, and indicates low enrollment in the livestock specialty track. The proposal will eliminate the low enrollment track, and all animal science students will be united for enrollment numbers. The curriculum has been closely considered to still meet the needs of both types of students (those wanting to go to graduate school and production students).

#### P.4) Related Course(s)

AG 230 Sustainable Agriculture (3)  
AG 375 Intro To Genetic Analysis (3) or BIOL 376 Genetics (3)

AG 496 Senior Seminar in Agriculture (1)

AGBU 110 Microcomputing for Ag (3)

AGBU 320 Agribus Management (3)

AGEN 231 Intro To Ag Mech (3)

AGEC 330 Farm Management (3)

AGRN 310 Agronom Crop Prod Tropics (3)

AGRN 410 Soil-Plant Herbivore Interrltn (3)

ANSC 141 Intro To An Science (3)

ANSC 223 Intro to Wildlife Sciences (3)

ANSC 254 Fundamentals of Nutrition (3)

ANSC 350 Anatomy/Physiol Of Farm Animal (3)

ANSC 351 Swine Production (3)

ANSC 353 Horse Production (3)

ANSC 357 Ruminant Production Systems (3)

ANSC 445 An Breeding/Genetics (3)

ANSC 450 Physiology Reproduction (3)

ANSC 453 Diseases and Parasites (3)

BIOL 171-171L Introductory Biology I (3), Introductory Biology I Lab (1)

BIOL 172-172L Introductory Biology II (3), Introductory Biology II Lab (1)

BIOL 275-275L Fund Microbiology (3), Microbiology Lab (1)

BIOL 280 Biostatistics (3)

BIOL 410 Biochemistry (3)

CHEM 141 Surv Organ Chem & Biochem

CHEM 151 Elementary Survey of Chemistry (3)

CHEM 151 Elementary Survey of Chemistry Lab (1)

CHEM 161-161L General Chemistry I (3), General Chemistry I Lab (1)\*

CHEM 162-162L General Chemistry II (3), General Chemistry II Lab (1)\*

CHEM 241-241L Organic Chem I (3), Organic Chem I Lab (1)

CHEM 242-242L Organic Chem II (3), Organic Chem II Lab (1)

ENG 225 Writng for Sci & Technology (3)

HORT 262 Princ Of Hort (3)

MATH (Choose one course from the following courses):

MATH 135 Precalc: Elementary Functions (3)

MATH 140 Precalc: Trig/Analytic Geometry (3)

MATH 140X Precalculus (4)

MATH 241 Calculus I (4)

MATH 242 Calculus II (4)

PHYS 151-151L College Physics I (3), College Physics I Lab (1)

PHYS 152-152L College Physics II (3), College Physics II Lab (1)

**P.5) Course(s) from Other Departments**

Yes



**Courses****P.6) Proposal Impact(s) - Resources**

None.

**P.7) Department Vote**

	DATE	APPROVE	NOT APPROVE	ABSTAIN
DEPT VOTE	2019/09/20	6	0	0

**P.8) Proposal Supporting Documents****P.9) Proposer Notes**

CCRC Vote: 10/31/19 6-0-1

## 1) Program Information

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**1.1) Degree Type**

Bachelor of Science

**1.2) Program Description**

This track of study provides students with a variety of animal science courses related to health and management. In the final years of study, students will take courses aimed at making them qualified for their next academic or professional endeavors. For those who aspire to work on farms, ranches or in the livestock industry, additional agriculture business, general agriculture, and agricultural mechanics will be provided as curriculum options. These courses will prepare students for employment opportunities with farms, dairies, ranches, equestrian centers, experiment stations, quarantine stations, veterinary clinics and zoos. For those who aspire to apply to professional school (veterinary medicine) or a graduate program (M.S. or Ph.D.), curriculum options include courses that are pre-requisites for major veterinary schools such as additional biology and chemistry courses.

**1.3) Program Catalog Description**

This track of study provides students with a variety of animal science courses related to health and management. In the final years of study, students will take courses aimed at making them qualified for their next academic or professional endeavors. For those who aspire to work on farms, ranches or in the livestock industry, additional agriculture business, general agriculture, and agricultural mechanics will be provided as curriculum options. These courses will prepare students for employment opportunities with farms, dairies, ranches, equestrian centers, experiment stations, quarantine stations, veterinary clinics and zoos. For those who aspire to apply to professional school (veterinary medicine) or a graduate program (M.S. or Ph.D.), curriculum options include courses that are pre-requisites for major veterinary schools such as additional biology and chemistry courses.

**Student Learning Outcomes**

1. Students will achieve a working knowledge of biology, chemistry, and mathematics as a foundation for further studies.
2. Students will achieve a basic understanding in the different animal science disciplines and be able to apply this knowledge to effectively manage and care for livestock.
3. Students will have experiential learning opportunities with farm animals through routine hands-on laboratories held at the UH Hilo Agricultural Farm Laboratory. When available, field trips to local farms and ranches will also provide learning opportunities with farm animals. Students will gain hands-on experience with livestock to help enhance their competitiveness in future studies and careers.
4. Students will use and refine their communication skills in various classes.
5. Students will develop and apply their computer skills to agricultural examples.

### **Group 1. General Education Foundation, Diversification, Structural, and Integrative Requirements in effect Fall 2018**

Students may choose to graduate under the General Education Foundation, Diversification, Structural and Integrative requirements and graduation requirements in force at the time they entered the UH System, when they entered UH Hilo, or when they graduate, provided there is no break in enrollment.

Students should meet with their academic advisor to ensure that they enroll in courses that will enable them to meet these requirements as well as requirements for the major and for graduation. Some courses may meet both General Education requirements and major requirements.

The new GE foundations, diversification, structural and integrative requirements and lists of certified courses are posted on the General Education website.

### **Group 2. Major Requirements (74-86 credits)**

#### **Agriscience: (34 credits)**

- AG 230 Sustainable Agriculture (3)
- AG 496 Senior Seminar in Agriculture (1)
- AGBU 110 Microcomputing for Ag (3)
- ANSC 141 Intro To An Science (3)
- ANSC 254 Fundamentals of Nutrition (3)
- ANSC 350 Anatomy/Physiol Of Farm Animal (3)
- ANSC 445 An Breeding/Genetics (3)
- ANSC 450 Physiology Reproduction (3)
- ANSC 453 Diseases and Parasites (3)
- Choose **three** courses from the following ANSC courses:
  - ANSC 223 Intro to Wildlife Sciences (3)
  - ANSC 351 Swine Production (3)
  - ANSC 353 Horse Production (3)
  - ANSC 357 Ruminant Production Systems (3)

#### **Supplemental Requirements: (28 -30)**

- BIOL 171-171L Introductory Biology I (3), Introductory Biology I Lab (1)
- BIOL 172-172L Introductory Biology II (3), Introductory Biology II Lab (1)
- BIOL 275-275L Fund Microbiology (3), Microbiology Lab (1)
- BIOL 280 Biostatistics (3)
- CHEM 161-161L General Chemistry I (3), General Chemistry I Lab (1)\*
- CHEM 162-162L General Chemistry II (3), General Chemistry II Lab (1)\*
- ENG 225 Writng for Sci & Technology (3)
- MATH (Choose **one** course from the following courses):
  - MATH 135 Precalc: Elementary Functions (3)
  - MATH 140 Precalc:Trig/Analytic Geometry (3)
  - MATH 140X Precalculus (4)

- o MATH 241 Calculus I (4)
- o MATH 242 Calculus II (4)

### **Livestock Production (12) or Pre-Vet Sequences (22)**

- Livestock Sequence
  - o HORT 262 Princ Of Hort (3)
  - o AGEN 231 Intro To Ag Mech (3)
  - o AGRN 310 Agronom Crop Prod Tropics (3) or AGRN 410 Soil-Plant Herbivore Interrltn (3)
  - o AGBU 320 Agribus Management (3) or AGECE 330 Farm Management (3)

\*CHEM 161-161L/CHEM 162-162L in supplemental requirements can be substituted with Chem 141/Chem 151-151L

- Pre-Vet Sequence
  - o PHYS 151-151L College Physics I (3), College Physics I Lab (1)
  - o PHYS 152-152L College Physics II (3), College Physics II Lab (1)
  - o CHEM 241-241L Organic Chem I (3), Organic Chem I Lab (1)
  - o CHEM 242-242L Organic Chem II (3), Organic Chem II Lab (1)
  - o AG 375 Intro To Genetic Analysis (3) or BIOL 376 Genetics (3)
  - o BIOL 410 Biochemistry (3)

## Group 3. Electives, To be determined

Elective hours will vary depending upon which GE courses are selected by the student.

*See your advisor for possible electives to help you qualify for pharmacy and medical programs.*

## Total Semester Hours Required for the B.S. in Agriculture: Animal Science—Pre-Veterinary Specialty

123 credits required.

### **1.4) College**

CAFNRM

### **1.5) Department**

Agriculture- CAFNRM

## **2) Program Requirements**

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### **2.1) Minimum Number of Credits**

123 credits required.

### **2.2) Minimum GPA**

2.0

### **2.3) Minimum Acceptable Grade**

1.0

## 2.4) Program Notes

See Attachments. In line paste will not keep formatting.

## 3) Attachments

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- Animal Science Tracks New Alphabetical Order.docx
- Animal Health and Management Catalog.docx
- Animal Science Tracks New Curriculum \_9.26.docx