

**New Program Code**       **Replace Program Code**      Date: \_\_\_\_\_

**REQUESTOR CONTACT INFORMATION**

Name \_\_\_\_\_ Campus \_\_\_\_\_  
 Title \_\_\_\_\_ Email \_\_\_\_\_  
 Office/Dept \_\_\_\_\_ Phone \_\_\_\_\_

**NEW PROGRAM CODE TO CREATE**

Institution \_\_\_\_\_ Campus \_\_\_\_\_  
 Level \_\_\_\_\_ Effective Term \_\_\_\_\_

	Code (Max. Characters)	Description	Check if requesting new code:
College	(2) _____	_____	<input type="checkbox"/> See Banner form STV_COLL
Department	(4) _____	_____	<input type="checkbox"/> See Banner form STV_DEPT
Degree/Certificate	(6) _____	_____	<input type="checkbox"/> See Banner form STV_DEGC
Major	(4) _____	_____	<input type="checkbox"/> See Banner form STV_MAJR
Concentration	(4) _____	_____	<input 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:  
 \_\_\_\_\_

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.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.*

Special Program Designations     A     B     N     P     T     U

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

Required Terms of Enrollment:     Fall     Spring     Summer     Extended

**EXISTING PROGRAM CODE TO REPLACE, IF APPLICABLE**

Program Code _____	Program Description _____
Institution _____	Campus _____
College _____	Department _____
Level _____	
Are current students "grandfathered" under the program code? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Should the old program code be available for use in Banner? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Effective <span style="border: 1px solid black; display: inline-block; width: 100px; height: 1.2em; vertical-align: middle;"></span> , old program code will no longer be available to admit or recruit students.	
Term (ie. Fall 2020)	
<i>This will turn off the online application, recruitment (effects Banner forms SRASUMI and SRAQUIK) and admissions (effects Banner forms SAADCRV, SAAADMS, SAASUMI, SAAQUIK, and SAAQUAN) Banner modules.</i>	
Effective <span style="border: 1px solid black; display: inline-block; width: 100px; height: 1.2em; vertical-align: middle;"></span> , old program code will no longer be available to award degree to students.	
Term (ie. Fall 2020)	
<i>This will turn off the general student (effects Banner form SGASTDN) and academic history (effects Banner form SHADEGR) Banner modules.</i>	

**ATTACHMENTS**

**BOR Approved:** Sole-credential Certificate, Associate, 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

<p><b>CERTIFICATES ONLY: Please check one (1) statement.</b> This certificate is a...</p> <p><input type="checkbox"/> BOR approved certificate. BOR Meeting/Approval Date: _____</p> <p><input type="checkbox"/> Chancellor approved within an authorized BOR program. BOR Program: _____</p> <p><input type="checkbox"/> Chancellor approved CO in accordance with UHCCP 5.203, Section IV.B.10.</p>
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**VERIFICATIONS**

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

<p><b>Registrar</b> (Print Name)</p> <p>_____</p>	<p><b>Financial Aid Officer</b> (Print Name)</p> <p>_____</p>	<p><b>For Community Colleges, verification of consultation with OVPCC Academic Affairs:</b> Tammi Oyadomari-Chun</p> <p>_____</p>
Signature	Date	Signature
Signature	Date	Signature
Date	Date	Date

**ADDITIONAL COMMENTS**



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**Re: Request to change degree name from Bachelor of Science in Tropical Plant & Soil Sciences to Bachelor of Science in Tropical Agriculture & the Environment**

1 message

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**Anna Wieczorek** <ania@hawaii.edu>

Thu, Mar 2, 2017 at 9:26 AM

To: Jodi Chee <jodichee@hawaii.edu>, Stuart Lau <stuartl@hawaii.edu>

Cc: Lisa Kitagawa-Akagi <KitagawaL@ctahr.hawaii.edu>, "Spafford, Helen" <hspaffor@hawaii.edu>, "Robert E. Paull" <paull@hawaii.edu>, Lydia Gerakas <AcadAff@ctahr.hawaii.edu>

Aloha Jodi,

Here's the information you asked for

- Degree to be awarded: Bachelor of Science (code and description already exists)
- College to be designated: CTAHR (already exists)
- Department to be designated: TPSS
- Field of Study (i.e. major): Trop Agriculture & Environment
- Need a code (four character maximum) to identify major: TAE
- Length of program in years : 4 years.
- Minimum number of credits required. 120 credits.
- Required semesters (Fall/Spring/Summer/Extension): Fall/Spring are required, Summer/Extension are optional.
- 50% of the program offered at a location other than the home campus: NO
- Need to identify students to move to new program: Students currently in TPSS and PEPS will not be moved to the new TAE program unless they request to be moved. If students request to be moved, the CTAHR academic advisors will submit the "curriculum transfer form" to the Records Office. Students admitted for the fall 2017 semester should be automatically put into the TAE program, since the TPSS and PEPS undergraduate curriculum is not admitted new students as of the fall 2017 semester.
- Need to identify courses that require changes to course restrictions or prerequisites: None at this point

Thank you for your help,  
Ania

**Ania Wieczorek, PhD.**

Interim Associate Dean for Academic and Student Affairs  
College of Tropical Agriculture and Human Resources  
3050 Maile Way, Gilmore Hall 211  
University of Hawai'i at Mānoa  
Honolulu, HI 96822-2231  
Phone: 808-956-6997  
Fax: 808-956-3706

Principal Investigator and Director Gene-ius Day Program  
<http://www.ctahr.hawaii.edu/geneius-day/>

On Feb 27, 2017, at 2:57 PM, Jodi Chee <jodichee@hawaii.edu> wrote:

Hi Dr. Wieczorek,

We received the following email from University Registrar, Stuart Lau. I have highlighted in yellow items that needs to be addressed and provided answers to. Could you please review those below and reply all?

Thank you for your assistance.

Jodi Chee  
Institutional Support  
Assistant to the Associate Vice Chancellor for Academic Affairs  
Office of the Vice Chancellor for Academic Affairs  
2500 Campus Road, Hawai'i Hall 209  
Honolulu, HI 96822  
Phone: 808-956-7486  
Fax: 808-956-7155

**From:** Stuart Lau [<mailto:stuartl@hawaii.edu>]  
**Sent:** Monday, February 27, 2017 1:50 PM  
**To:** Jodi Chee <[jodichee@hawaii.edu](mailto:jodichee@hawaii.edu)>  
**Cc:** Stuart Lau <[stuartl@hawaii.edu](mailto:stuartl@hawaii.edu)>  
**Subject:** Re: Request to change degree name from Bachelor of Science in Tropical Plant & Soil Sciences to Bachelor of Science in Tropical Agriculture & the Environment

Hi Jodi,

I am working on have the new code created in Banner. In order to request to have a new code created, the following needs to be clarified or confirmed:

Degree to be awarded: Bachelor of Science (code and description already exists)  
College to be designated as CTAHR (already exists)  
Department to be designated as: Will it be TPSS or PEPS or some other name

Field of Study (i.e. major).

"Tropical Agriculture and the Environment" is 40 characters. The description needs to be shortened by 10 characters to 30 characters.

Need a code (four character maximum) to identify major. "TAE" is available.

Need the following program information:

1. Length of program in years. Confirm that it is 4 years.
2. Minimum number of credits required. Confirm that it is 120 credits.
3. Required semesters (Fall/Spring/Summer/Extension)
4. Is 50% of the program offered at a location other than the home campus.

Need to identify students to move to new program.

Need to identify courses that require changes to course restrictions or prerequisites.

Any information you are able to provide is appreciated.

Thanks,  
Stuart

On Thu, Feb 16, 2017 at 1:11 PM, Jodi Chee <[jodichee@hawaii.edu](mailto:jodichee@hawaii.edu)> wrote:

Dear Chairs Paull and Spafford,

Attached, please find the approved memo "Request to change degree name from Bachelor of Science in Tropical Plant and Soil Sciences to Bachelor of Science in Tropical Agriculture and the Environment. This will serve as your official document, as the original will be kept in the OVCAA files.

Thank you,

Jodi Chee  
Institutional Support  
Assistant to the Associate Vice Chancellor for Academic Affairs  
Office of the Vice Chancellor for Academic Affairs  
2500 Campus Road, Hawai'i Hall 209  
Honolulu, HI 96822  
Phone: 808-956-7486  
Fax: 808-956-7155

--

\*\*\*\*\*

Stuart Lau  
University Registrar  
Office of the Registrar  
University of Hawaii at Manoa  
Ph: 808 956-8010

\*\*\*\*\*

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## Re: Request to change degree name from Bachelor of Science in Tropical Plant & Soil Sciences to Bachelor of Science in Tropical Agriculture & the Environment

1 message

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Stuart Lau <stuartl@hawaii.edu>  
To: Jodi Chee <jodichee@hawaii.edu>  
Cc: Stuart Lau <stuartl@hawaii.edu>

Mon, Feb 27, 2017 at 1:49 PM

Hi Jodi,

I am working on have the new code created in Banner. In order to request to have a new code created, the following needs to be clarified or confirmed:

Degree to be awarded: Bachelor of Science (code and description already exists)  
College to be designated as CTAHR (already exists)  
Department to be designated as: Will it be TPSS or PEPS or some other name

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4. Is 50% of the program offered at a location other than the home campus.

Need to identify students to move to new program.

Need to identify courses that require changes to course restrictions or prerequisites.

Any information you are able to provide is appreciated.

Thanks,  
Stuart

On Thu, Feb 16, 2017 at 1:11 PM, Jodi Chee <jodichee@hawaii.edu> wrote:

Dear Chairs Paull and Spafford,

Attached, please find the approved memo "Request to change degree name from Bachelor of Science in Tropical Plant and Soil Sciences to Bachelor of Science in Tropical Agriculture and the Environment. This will serve as your official document, as the original will be kept in the OVCAA files.

Thank you,

Jodi Chee

Institutional Support

Assistant to the Associate Vice Chancellor for Academic Affairs

Office of the Vice Chancellor for Academic Affairs

2500 Campus Road, Hawai'i Hall 209

Honolulu, HI 96822

Phone: 808-956-7486

Fax: 808-956-7155

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\*\*\*\*\*

Stuart Lau  
University Registrar  
Office of the Registrar  
University of Hawaii at Manoa  
Ph: 808 956-8010  
\*\*\*\*\*

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## Request to change degree name from Bachelor of Science in Tropical Plant & Soil Sciences to Bachelor of Science in Tropical Agriculture & the Environment

1 message

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Jodi Chee <jodichee@hawaii.edu>

Thu, Feb 16, 2017 at 1:11 PM

To: Helen Spafford <hspaffor@hawaii.edu>, paull@hawaii.edu

Cc: novotnyr@ctahr.hawaii.edu, risad@hawaii.edu, Ronald Cambra <cambra@hawaii.edu>, Stella Hieda <stella@hawaii.edu>, iboshi@hawaii.edu, Stuart Lau <stuartl@hawaii.edu>, Diane Nakashima <dianena@hawaii.edu>, Wendy Pearson <pearsonw@hawaii.edu>

Dear Chairs Paull and Spafford,

Attached, please find the approved memo "Request to change degree name from Bachelor of Science in Tropical Plant and Soil Sciences to Bachelor of Science in Tropical Agriculture and the Environment. This will serve as your official document, as the original will be kept in the OVCAA files.

Thank you,

Jodi Chee

Institutional Support

Assistant to the Associate Vice Chancellor for Academic Affairs

Office of the Vice Chancellor for Academic Affairs

2500 Campus Road, Hawai'i Hall 209

Honolulu, HI 96822

Phone: 808-956-7486

Fax: 808-956-7155

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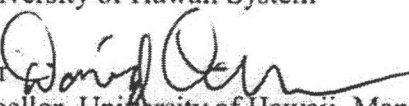
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of Hawai'i  
Mano'a

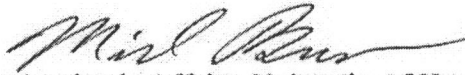
College of Tropical Agriculture and Human Resources  
Department of Tropical Plant and Soil Sciences  
Department of Plant & Environmental Protection Sciences

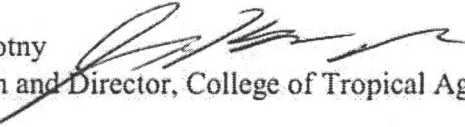
December 7, 2016


**MEMORANDUM**

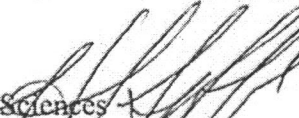
**TO:** David Lassner  
President, University of Hawaii System

**VIA:** David Lassner   
Interim Chancellor, University of Hawaii, Manoa

**VIA:** Michael Bruno   
Interim Vice Chancellor for Academic Affairs, University of Hawaii, Manoa

**VIA:** Rachel Novotny   
Interim Dean and Director, College of Tropical Agriculture and Human Resources

**FROM:** Robert Paull   
Chair, Department of Tropical Plant and Soil Sciences

Helen Spafford   
Chair, Department of Plant and Environmental Protection Sciences

Digitally signed by Robert E Paull  
DN: cn=Robert E Paull, o=University of  
Hawaii at Manoa, ou=Tropical Plant & Soil  
Sciences, email=paull@hawaii.edu, c=US  
Date: 2016.12.07 06:23:57 -10'00'

**SUBJECT:** Request to change degree name from Bachelor of Science in Tropical Plant and Soil Sciences to Bachelor of Science in Tropical Agriculture and the Environment

**SPECIFIC ACTION REQUESTED:**

We request that the name of the Bachelor of Science degree, "Tropical Plant and Soil Sciences," be changed to the Bachelor of Science degree, "Tropical Agriculture and the Environment," to be administered by the Tropical Plant and Soil Sciences (TPSS) and Plant and Protection Sciences (PEPS) departments.

**RECOMMENDED EFFECTIVE DATE:**

Beginning of Fall 2017 semester

**ADDITIONAL COST:**

No additional costs are associated with this action or its implementation.

**PURPOSE:**

To better reflects the broader outcomes of the consolidated undergraduate programs of TPSS and PEPS, faculty in the TPSS and PEPS departments approved and recommend changing the name of the Tropical Plants and Soil Sciences BSc degree to Tropical Agriculture and the Environment BSc degree.

**BACKGROUND INFORMATION:**

During the last two years, the TPSS and PEPS departments have been working closely to consolidate their undergraduate programs into a single academic program.

To date, this coordinated effort has resulted in (1) the addition of a new track in the TPSS undergraduate program (see Attachment 1) and (2) discontinuing admission of students into the PEPS undergraduate program (see Attachment 2). We will ask that the PEPS undergraduate program be discontinued in five years.

The next important step in the process is to rename the TPSS program so that reflects the broader interests of TPSS's and PEPS's faculty and students and the consolidation of the programs.

To that end, the joint TPSS-PEPS Curriculum Committee developed a process for identifying an appropriate name for the consolidated academic program. Under that process, faculty and students in TPSS and PEPS were surveyed and a focus group of students was convened to generate best candidate names. The above consultative process yielded four short-list names which were presented to the PEPS and TPSS faculty at separate departmental meetings, then at a joint meeting of both departments. The PEPS and TPSS faculty were asked to rank the four names in an online survey (40 faculty responded).

The highest ranked name, and the name of the consolidated undergraduate academic program being proposed by TPSS and PEPS, is Tropical Agriculture and the Environment (TAE).

During the last month, we have contacted others within and outside of CTAHR to canvas their support for the proposed program name. The CTAHR Faculty Senate endorsed the proposed name in its November 7, 2016 meeting. The College of Natural Sciences, Department of Biology, and Department of Botany (see Attachment 4) were also contacted and have indicated their support of the name change.

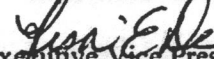
A Joint Curriculum committee consisting of faculty from both TPSS and PEPS has been established. The By-laws of the committee were voted upon and accepted by faculty of both departments (Attachment 3).

**ACTION RECOMMENDED:**

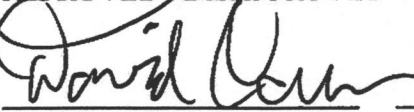
We recommend that you approve the proposed change in the name of the Bachelor of Science degree in Tropical Plant and Soil Sciences to the Bachelor of Science degree in Tropical Agriculture and the Environment (TAE), effective Fall 2017.

**Attachments:**

- Attachment 1. January 07, 2016, Memo-Request to Change Bachelor of Science in Tropical Plant & Soil Sciences
- Attachment 2. April 26, 2016 memo-Request to Stop-Out Admissions for Bachelor of Science in Plant and Environmental Protection Sciences
- Attachment 3. Expressions of support from other UHM units.

Cc:  Risa Dickson, Executive Vice President for Planning and Policy  
Vice President for Academic Planning and Policy

APPROVED / DISAPPROVED

  
David Lassner \_\_\_\_\_ Date FEB 16 2017



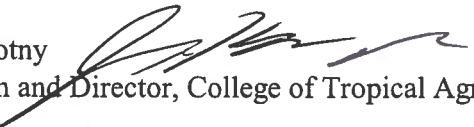
December 7, 2016

**MEMORANDUM**

**TO:** David Lassner  
President, University of Hawaii System

**VIA:** David Lassner  
Interim Chancellor, University of Hawaii, Manoa

**VIA:** Michael Bruno   
Interim Vice Chancellor for Academic Affairs, University of Hawaii, Manoa

**VIA:** Rachel Novotny   
Interim Dean and Director, College of Tropical Agriculture and Human Resources

**FROM:** Robert Paull  
Chair, Department of Tropical Plant and Soil Sciences



Digitally signed by Robert E Paull  
DN: cn=Robert E Paull, o=University of  
Hawaii at Manoa, ou=Tropical Plant & Soil  
Sciences, email=paull@hawaii.edu, c=US  
Date: 2016.12.07 06:23:57 -10'00'

Helen Spafford  
Chair, Department of Plant and Environmental Protection Sciences



**SUBJECT:** Request to change degree name from Bachelor of Science in Tropical Plant and Soil Sciences to Bachelor of Science in Tropical Agriculture and the Environment

**SPECIFIC ACTION REQUESTED:**

We request that the name of the Bachelor of Science degree, "Tropical Plant and Soil Sciences," be changed to the Bachelor of Science degree, "Tropical Agriculture and the Environment," to be administered by the Tropical Plant and Soil Sciences (TPSS) and Plant and Protection Sciences (PEPS) departments.

**RECOMMENDED EFFECTIVE DATE:**

Beginning of Fall 2017 semester

**ADDITIONAL COST:**

No additional costs are associated with this action or its implementation.

**PURPOSE:**

To better reflects the broader outcomes of the consolidated undergraduate programs of TPSS and PEPS, faculty in the TPSS and PEPS departments approved and recommend changing the name of the Tropical Plants and Soil Sciences BSc degree to Tropical Agriculture and the Environment BSc degree.

**BACKGROUND INFORMATION:**

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To that end, the joint TPSS-PEPS Curriculum Committee developed a process for identifying an appropriate name for the consolidated academic program. Under that process, faculty and students in TPSS and PEPS were surveyed and a focus group of students was convened to generate best candidate names. The above consultative process yielded four short-list names which were presented to the PEPS and TPSS faculty at separate departmental meetings, then at a joint meeting of both departments. The PEPS and TPSS faculty were asked to rank the four names in an online survey (40 faculty responded).

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During the last month, we have contacted others within and outside of CTAHR to canvas their support for the proposed program name. The CTAHR Faculty Senate endorsed the proposed name in its November 7, 2016 meeting. The College of Natural Sciences, Department of Biology, and Department of Botany (see Attachment 4) were also contacted and have indicated their support of the name change.

A Joint Curriculum committee consisting of faculty from both TPSS and PEPS has been established. The By-laws of the committee were voted upon and accepted by faculty of both departments (Attachment 3).

**ACTION RECOMMENDED:**

We recommend that you approve the proposed change in the name of the Bachelor of Science degree in Tropical Plant and Soil Sciences to the Bachelor of Science degree in Tropical Agriculture and the Environment (TAE), effective Fall 2017.

**Attachments:**

- Attachment 1. January 07, 2016, Memo-Request to Change Bachelor of Science in Tropical Plant & Soil Sciences
- Attachment 2. April 26, 2016 memo-Request to Stop-Out Admissions for Bachelor of Science in Plant and Environmental Protection Sciences
- Attachment 3. Expressions of support from other UHM units.

**Cc:** Risa Dickson, Executive Vice President for Planning and Policy

APPROVED / DISAPPROVED

\_\_\_\_\_  
David Lassner

\_\_\_\_\_  
Date



UNIVERSITY  
of HAWAII  
MĀNOA

RECEIVED

16 JAN 19 19 57

MANOA CHANCELLOR'S  
OFFICE

ORIGINAL

DATE: January 7, 2016

MEMORANDUM

TO: Dr. Reed Dasenbrock  
Vice Chancellor for Academic Affairs

VIA: Dr. Maria Gallo *Maria Gallo*  
Dean, College of Tropical Agriculture and Human Resources

FROM: Dr. Russell Yost, *Russell Yost*  
Chair, Department of Tropical Plant and Soil Sciences  
AND  
Professor/Extension Specialist Mark Wright *Mark Wright*  
Chair, Department of Plant and Environmental Protection Sciences

RE: Changes to the existing Bachelor of Science in Tropical Plant and Soil Sciences

## SPECIFIC ACTION REQUESTED:

Approve proposed changes to the existing Bachelor of Science in Tropical Plant and Soil Sciences, specifically the inclusion of an additional track in Invasive Species Management.

## RECOMMENDED EFFECTIVE DATE:

Beginning of Fall Semester 2016

## BACKGROUND:

The Department of Tropical Plant and Protection Sciences currently offers a Bachelor of Science degree in Tropical Plant and Protection Sciences (TPSS) that has four tracks: plant production and management, plant genetics and physiology, tropical landscape horticulture, and environmental soil sciences. Students in this program of study complete a common core of classes and then select one of the four areas of specialization.

The Bachelor of Science in Plant and Environmental Protection Sciences (PEPS) requires many of the same classes for students as the TPSS program and many of the required and optional classes are cross-listed as offerings of both Departments. Both these programs have low annual graduation rates, ca 5-11 students per year.

In response to an external College review and internal strategic planning effort, the Faculty of both Departments have met and agreed upon the following changes to the TPSS BS program that will occur concurrently with a proposed discontinuation of the PEPS BS program. The proposed changes have been discussed with both Departments.

#### PROPOSED CHANGES

The Bachelor of Science in Tropical Plant and Protection Sciences will have a common core of classes and five areas of specialization: plant production and management, plant genetics and physiology, tropical landscape horticulture, environmental soil sciences, and invasive species management (ISM). This revised curriculum uses existing courses and requires no new course approvals. The proposed change should not impact any other academic programs at UHM/UH besides TPSS and PEPS.

#### Changes to the Common Core

The common core of classes will be similar to what is already required by the TPSS program. Only 6 additional credits in two classes will be required: (TPSS/PEPS 499 and Biology 265). The total credit requirement for the common core will be 21 credits.

#### Existing TPSS Core

TPSS 200	3 credits	Tropical Crop Science
TPSS 304	4 credits	Fundamentals of Soil Science
PEPS 421	4 credits	Foundations of Pest Management
TPSS 470, 470L	4 credits	Plant Physiology and Lab

#### New Core inclusions

Biology 265	3 credits	Ecology and Evolution
TPSS/PEPS 499	3 credits	Directed Research

#### Changes to Existing Specializations

The existing specializations in the TPSS program will have no change.

#### Inclusion of a New Specialization

The inclusion of a new specialization, invasive species management, will attract students to the TPSS program who would have otherwise been enrolled in the Bachelor of Science in PEPS (which we will request approval to discontinue) and provide greater cohesion in instruction in an important human endeavor. The students in the ISM specialization will complete the following required classes (**20 credits**).

**PEPS 350 Invasive Pest Species**

**PEPS 363 General Entomology**

**PEPS 363 L General Entomology Laboratory**

**PEPS 405 Plant Pathogens and Diseases**

**PEPS 422 Biocontrol of Invasive Species**

**PEPS 430 Plant Disease Management**

**PEPS 481 Weed Science**

Students in the ISM specialization will also complete **12 credits** from the following selection of courses:

**PEPS 310 Environment and Agriculture**

**PEPS 371 Genetics: theory to application**

**PEPS 410 Sustainable Plant and Soil Health Management**

**PEPS 418 Turfgrass pest management**

**PEPS 451 Environmental Law**

**PEPS 463 Urban pest management**

**PEPS 486 Insect Microbe Interactions**

**GEOG 388 Introduction to Geographic Information Systems**

With the required classes and the additional 12 credits, the ISM track will require completion of **32 credits**.

Thus the requirement for a student in the ISM specialization of the TPSS program will be

21 common core (15 upper division)

32 specialization (32 upper division)

**53 total credits (47 upper division)**

Students will complete the CTAHR required courses and meet all other University general education and requirements as specified including a minimum of 120 total credits for graduation. A sample program sheet is attached for the revised TPSS program with an ISM specialization and sample program sheets for the other specializations with the minor revisions and additional core courses.

**Program Administration**

The TPSS program will be jointly administered by Faculty of both TPSS and PEPS Departments including approval of any program changes, course approvals, deletions etc. A set of By-Laws will be drafted to define the administration.

**Expected Outcome of Proposed Changes**

Implementation of the proposed changes will increase the enrollment and graduation rates in an existing BS program and meet an existing and projected need for graduates with explicit training in invasive species management for plant production and environmental protection.

**RECOMMENDED ACTION:**

Approval of the inclusion of an additional area of specialization, invasive species management, in the TPSS BS program and additional minor program changes as indicated.

APPROVED/DISAPPROVED:

  
\_\_\_\_\_  
\_\_\_\_\_

Effective Term: Fall 2016

DATE: 3/22/2016

DATE: \_\_\_\_\_



**Tropical Plant & Soil Sciences  
University of Hawaii at Manoa**

**Advising Checklist for Environmental Soil Sciences**

**Student** \_\_\_\_\_

**UH ID** \_\_\_\_\_

All courses are 3 credits, unless otherwise indicated.

**I. University Core Requirements (UHM) (40 credits)**

**A. Foundations**

Written Communication (ENG 100) \_\_\_\_\_  
 Symbolic Reasoning\* (MATH 215) \_\_\_\_\_  
 Global & Multicultural Perspectives (6 cr.) \_\_\_\_\_

**B. Diversification**

Arts, Humanities & Literature (6 cr.) \_\_\_\_\_  
 Social Sciences (6 cr.) \_\_\_\_\_  
 Natural Sciences (16)\*  
     BIOL 171 and BIOL 171L(1) \_\_\_\_\_  
     BIOL 172 and BIOL 172L(1) \_\_\_\_\_  
     CHEM 161 and CHEM 161L (1) \_\_\_\_\_  
     CHEM 162 and CHEM 162L (1) \_\_\_\_\_

\*The Symbolic Reasoning and Natural Sciences requirements are to be completed by the end of the student's third semester in TPSS

**C. Special Graduation Requirements (0 to 15 credits)**

Hawaiian, Asian & Pacific (H) \_\_\_\_\_  
 Contemporary Ethical Issues (E) \_\_\_\_\_  
 Oral Communications (O) \_\_\_\_\_  
 Writing Intensive (W) (5 courses, 2 upper division) \_\_\_\_\_  
 (TPSS 200 & TPSS 492, PEPS 421, plus 2 others) \_\_\_\_\_

The Contemporary Ethical Issues (E) requirement can be satisfied by taking any one of the following:

- CMB 351/BIOL 340 Genetics, Evolution and Society
- MBBE/BIOL 304, Biotechnology: Science and Ethical Issues
- PEPS 310 Environment and Agriculture
- PEPS 350 Invasive Pest Species
- PEPS 451 Environmental Law
- TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology

**II. College Requirements (CTAHR) (7 or 8 credits)**

\_\_\_\_ NREM 310 Statistics in Agriculture Or \_\_\_\_ FAMR 380 & 380L Research Methodology  
 \_\_\_\_ TPSS 492 Internship (1) And \_\_\_\_ TPSS 492L W Internship Field Experience

**III. TPSS Core Requirements (21 credits)**

\_\_\_\_ BIOL 265 Ecology and Evolutionary Biology  
 \_\_\_\_ PEPS 421 W Foundations of Pest Managmt (4) \_\_\_\_ TPSS/PEPS 499 Directed Research (3)  
 \_\_\_\_ TPSS 200 W Tropical Crop Science \_\_\_\_ TPSS 304 Fundamentals of Soil Science (4)  
 \_\_\_\_ TPSS 470 /470L (1) Plant Physiology

**IV. TPSS Requirements for this major specialization (31 credits)**

**Group A. Fundamental courses**

**(Complete all 4 courses, 13 credits)**

\_\_\_ TPSS 435 Environmental Soil Chemistry

\_\_\_ TPSS 460 Plant Soil Atmosphere Physics

\_\_\_ TPSS 450 Nutrient Mgmt Soils & Plants (4)

\_\_\_ TPSS 475 Plant Nutrient Diagnosis

**Group B. Electives for this major specialization**

**(Select courses from the following for 18 credits minimum)**

\_\_\_ GEOG 401 Climate Change

\_\_\_ GEOG 402 Agricultural Climatology

\_\_\_ GG 101 Dynamic Earth

\_\_\_ GG 425 Environmental Geochemistry

\_\_\_ MICRO 485 Microbes and their Environment

\_\_\_ MET/ATMO 310 Global Change

\_\_\_ NREM 301 Natural Resources management (4)

\_\_\_ NREM 477 Geographic Information Systems for Resource Managers (4)

\_\_\_ PEPS 410 Sustainable Soil and Plant Health Management (2)

\_\_\_ TPSS 463 Irrigation and Water Management

\_\_\_ GEOG 405 Water in the Environment

\_\_\_ GG 103 Geology of the Hawaiian Islands

\_\_\_ GG402

\_\_\_ NREM 461 Soil Erosion & Conservation

**Total Credit Requirement: 120**

*Proposed for Fall 2016*

<u>Credit summary</u>	<u>Credits</u>	<u>% of 120</u>
UHM core	41	34.2
CTAHR core	8	6.7
TPSS core	21	17.5
TPSS Environmental Soil Sciences specialization	31	25.8
Special graduation & unrestricted electives	<u>19</u>	<u>15.8</u>
Total	120	100

**Tropical Plant & Soil Sciences  
University of Hawaii at Manoa**

**Advising Checklist for Plant Production and Management**

Student \_\_\_\_\_

UH ID \_\_\_\_\_

All courses are 3 credits, unless otherwise indicated.

**I. University Core Requirements (UHM) (40 credits)**

**A. Foundations**

Written Communication (ENG 100) \_\_\_\_\_  
 Symbolic Reasoning\* (MATH 140 or NREM 203) \_\_\_\_\_  
 Global & Multicultural Perspectives (6 cr.) \_\_\_\_\_

**B. Diversification**

Arts, Humanities & Literature (6 cr.) \_\_\_\_\_  
 Social Sciences (6 cr.) \_\_\_\_\_  
 Natural Sciences (16)\*  
     BIOL 171 and BIOL 171L(1) \_\_\_\_\_  
     BIOL 172 and BIOL 172L(1) \_\_\_\_\_  
     CHEM 161 and CHEM 161L (1) \_\_\_\_\_  
     CHEM 162 and CHEM 162L (1) \_\_\_\_\_

\*The Symbolic Reasoning and Natural Sciences requirements are to be completed by the end of the student's third semester in TPSS

**C. Special Graduation Requirements (0 to 15 credits)**

Hawaiian, Asian & Pacific(H) \_\_\_\_\_  
 Contemporary Ethical Issues (E), see choices below \_\_\_\_\_  
 Oral Communications (O) \_\_\_\_\_  
 Writing Intensive (W) (5 courses, 2 upper division) \_\_\_\_\_  
 (TPSS 200 & TPSS 492, PEPS 421, plus 2 others) \_\_\_\_\_

The Contemporary Ethical Issues (E) requirement will be satisfied by taking any one of the following:  
 CMB 351/BIOL 340 Genetics, Evolution and Society  
 MBBE/BIOL 304 Biotechnology: Science and Ethical Issues  
 PEPS 310 Environment and Agriculture  
 PEPS 350 Invasive Pest Species  
 PEPS 451 Environmental Law  
 TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology

**II. College Requirements (CTAHR) (7 or 8 credits)**

\_\_\_\_ NREM 310 Statistics in Agriculture Or \_\_\_\_ FAMR 380 & 380L Research Methodology  
 \_\_\_\_ TPSS 492 Internship (1) And \_\_\_\_ TPSS 492L W Internship Field Experience

**III. TPSS Core Requirements (21 credits)**

\_\_\_\_ BIOL 265 Ecology and Evolutionary Biology  
 \_\_\_\_ PEPS 421 W Foundations of Pest Managmt (4) \_\_\_\_ TPSS/PEPS 499 Directed Research (3)  
 \_\_\_\_ TPSS 200 W Tropical Crop Science \_\_\_\_ TPSS 304 Fundamentals of Soil Science (4)  
 \_\_\_\_ TPSS 470 /470L (1) Plant Physiology

**IV. TPSS Requirements for this major specialization (32 credits)**

**Group A. Fundamental courses**

**(Complete all 5 courses, 16 credits)**

- PEPS 363 General Entomology & Lab (1)
- TPSS 364 Horticulture Practices (2)
- TPSS 420 Plant Propagation
- TPSS 481 Weed Science
- PEPS 405 Plant Pathogens & Disease (4)

**Group B. Electives for this major specialization**

**(Select courses from the following for 16 credits minimum)**

**Take 6 courses from the two groups below, including at least 3 from group B.**

**Group B (Production courses; take 3 or more)**

- HWST 352 Advanced Taro Cultivation
- TPSS 220 Organic Crop Production (2)
- TPSS 300 Tropical Crop Production Systems (4)
- TPSS 401 Vegetable Crop Production
- TPSS 402 Flower and Foliage Crop Production
- TPSS 405 Turf Management
- TPSS 430 Nursery Management
- TPSS 440 Tissue Culture & Transformation
- TPSS 403 Tropical Fruit Production

**Group C (Supporting courses)**

- BUS 312 Principles of Marketing\*
- TPSS 311 Current topics in Plant Sciences (1)
- TPSS 336 Renewable Energy and Society
- TPSS 341 Agribusiness Accounting and Financial Analysis\*
- TPSS 350 Tropical Landscape Practices
- TPSS 351 Enterprise Management\*
- TPSS 352 Landscape Architecture History, Theory & Practice
- TPSS 353 Landscape Graphics Studio
- TPSS 354 Tropical Landscape Planting Design Studio
- TPSS 369 Ornamental Plant materials
- TPSS 371 Genetics: Theory to Application
- TPSS 409 Cultural Geography
- TPSS 416 Issues Concerning Biotechnology
- TPSS 421 Tropical Seed Science (2)
- TPSS 429 Spreadsheet Modeling for Business and Economic Analysis\*
- TPSS 435 Environmental Soil Chemistry
- TPSS 450 Nutrient Mgt. Soils & Plants (4)
- TPSS 453 Plant Breeding & Genetics
- TPSS 460 Plant Soil Atmosphere Physics
- TPSS 463 Irrigation and Water Management
- TPSS 473 Postharvest Physiology
- TPSS 475 Plant Nutrient Diagnosis
- TPSS 491 Experimental Topics (variable credit)
- TPSS 499 Directed Study (variable credit)
- TPSS 418 Turf Pest Management (4)

Any non-introductory MBBE, NREM, PEPS, GEOG, BOT, MET/ATMO, ACC, BUS, CHEM or PHYS course, or any other TPSS course with approval of the undergraduate academic advisor.

\* Students who complete these four courses will earn a Certificate in Agribusiness Management: TPSS 341, 351, 429 and BUS 312

**Total Credit Requirement: 120**

*Proposed for Fall 2016*

<u>Credit summary</u>	<u>Credits</u>	<u>% of 120</u>
UHM core	40	33.3
CTAHR core	8	6.7
TPSS core	21	17.5
TPSS Plant Production specialization	32	26.7
Special graduation & unrestricted electives	<u>19</u>	<u>15.8</u>
Total	120	100

**Tropical Plant & Soil Sciences  
University of Hawaii at Manoa**

**Advising Checklist for Plant Sciences  
(Emphasis on Genetics and Physiology)**

Student \_\_\_\_\_

UH ID \_\_\_\_\_

All courses are 3 credits, unless otherwise indicated.

**I. University Core Requirements (UHM) (40 credits)**

A. Foundations

Written Communication (ENG 100) \_\_\_\_\_  
 Symbolic Reasoning\* (MATH 140 or NREM 203) \_\_\_\_\_  
 Global & Multicultural Perspectives (6 cr.) \_\_\_\_\_

B. Diversification

Arts, Humanities & Literature (6 cr.) \_\_\_\_\_  
 Social Sciences (6 cr.) \_\_\_\_\_  
 Natural Sciences (16)\*  
     BIOL 171 and BIOL 171L(1) \_\_\_\_\_  
     BIOL 172 and BIOL 172L(1) \_\_\_\_\_  
     CHEM 161 and CHEM 161L (1) \_\_\_\_\_  
     CHEM 162 and CHEM 162L (1) \_\_\_\_\_

\*The Symbolic Reasoning and Natural Sciences requirements are to be completed by the end of the student's third semester in TPSS

C. Special Graduation Requirements (0 to 15 credits)

Hawaiian, Asian & Pacific(H) \_\_\_\_\_  
 Contemporary Ethical Issues (E), see choices below \_\_\_\_\_  
 Oral Communications (O) \_\_\_\_\_  
 Writing Intensive (W) (5 courses, 2 upper division) \_\_\_\_\_  
 (TPSS 200 & TPSS 492, PEPS 421, plus 2 others) \_\_\_\_\_

The Contemporary Ethical Issues (E) requirement will be satisfied by taking any one of the following:  
 CMB 351/BIOL 340 Genetics, Evolution and Society  
 MBBE/BIOL 304 Biotechnology: Science and Ethical Issues  
 PEPS 310 Environment and Agriculture  
 PEPS 350 Invasive Pest Species  
 PEPS 451 Environmental Law  
 TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology

**II. College Requirements (CTAHR) (7 or 8 credits)**

\_\_\_\_\_ NREM 310 Statistics in Agriculture Or \_\_\_\_\_ FAMR 380 &380L Research Methodology  
 \_\_\_\_\_ TPSS 492 Internship (1) And \_\_\_\_\_ TPSS 492L W Internship Field Experience

**III. TPSS Core Requirements (21 credits)**

\_\_\_\_\_ BIOL 265 Ecology and Evolutionary Biology  
 \_\_\_\_\_ PEPS 421 W Foundations of Pest Managmt (4) \_\_\_\_\_ TPSS/PEPS 499 Directed Research (3)  
 \_\_\_\_\_ TPSS 200 W Tropical Crop Science \_\_\_\_\_ TPSS 304 Fundamentals of Soil Science (4)  
 \_\_\_\_\_ TPSS 470 /470L (1) Plant Physiology

**IV. TPSS Requirements for this major specialization (30 credits)**

**Complete 10 courses from the two groups below, including at least 3 from group A.**

**Group A (Genetics & Physiology courses; take 3 or more)**

- \_\_\_ BIOL 340 Genetics, Evolution & Society
- \_\_\_ TPSS 371 Genetics: Theory to Application
- \_\_\_ TPSS 440 Tissue Culture/Transformation
- \_\_\_ TPSS 453 Plant Breeding & Genetics
- \_\_\_ MBBE 304 Biotechnology: Science & Ethical Issues
- \_\_\_ MBBE 401 Molecular Biotechnology

**Group B (Supporting courses)**

- \_\_\_ BIOL 124/124L Environment & Ecology
- \_\_\_ BIOL 407 Molecular Biology
- \_\_\_ BOT 201/201L Plant Evolutionary Diversity
- \_\_\_ BOT 410/410L Plant Anatomy
- \_\_\_ BOT 461 Systematics of Vascular Plants
- \_\_\_ GEO 101 The Natural Environment
- \_\_\_ MICR 314 Research Ethics
- \_\_\_ MBBE 402/402L or BIOL 402 or BIOC 341  
Biochemistry
- \_\_\_ PEPS 363/363L General Entomology
- \_\_\_ PEPS 403 Molecular Biosensors
- \_\_\_ PEPS 405 Plant Pathogens & Diseases
- \_\_\_ TPSS 300 Tropical Crop Production Systems
- \_\_\_ TPSS 336 Renewable Energy and Society
- \_\_\_ TPSS 351 Enterprise management
- \_\_\_ TPSS 409 Cultural Biogeography
- \_\_\_ TPSS 416 Issues Concerning Biotechnology
- \_\_\_ TPSS 420 Plant Propagation
- \_\_\_ TPSS 435 Environmental Soil Science
- \_\_\_ TPSS 450 Nutrient Mgmt. Soils & Plants
- \_\_\_ TPSS 460 Soil Plant Environment
- \_\_\_ TPSS 463 Irrigation & Water Management
- \_\_\_ TPSS 481 Weed Science
- \_\_\_ TPSS 491 Experimental Topics
- \_\_\_ Any non-introductory MBBE, NREM, PEPS, GEOG, BOT, MET/ATMO, ACC, BUS, CHEM or PHYS course, or any other TPSS course with approval of the undergraduate academic advisor.

\* Students who complete these four courses will earn a Certificate in Agribusiness Management: TPSS 341, 351, 429 and BUS 312

**Total Credit Requirement: 120**

*Proposed for Fall 2016*

<u>Credit summary</u>	<u>Credits</u>	<u>% of 120</u>
UHM core	40	33.3
CTAHR core	8	6.7
TPSS core	21	17.5
TPSS Plant Sciences specialization	30	25
Special graduation & unrestricted electives	<u>21</u>	<u>17.5</u>
Total	120	100

**Tropical Plant & Soil Sciences  
University of Hawaii at Manoa**

**Advising Checklist for Tropical Landscape Horticulture**

Student \_\_\_\_\_

UH ID \_\_\_\_\_

All courses are 3 credits, unless otherwise indicated.

**I. University Core Requirements (UHM) (40 credits)**

**A. Foundations**

Written Communication (ENG 100) \_\_\_\_\_  
 Symbolic Reasoning\* (MATH 140 or NREM 203) \_\_\_\_\_  
 Global & Multicultural Perspectives (6 cr.) \_\_\_\_\_

**B. Diversification**

Arts, Humanities & Literature (6 cr.) \_\_\_\_\_  
 Social Sciences (6 cr.) \_\_\_\_\_  
 Natural Sciences (16)\*  
     BIOL 171 and BIOL 171L(1) \_\_\_\_\_  
     BIOL 172 and BIOL 172L(1) \_\_\_\_\_  
     CHEM 161 and CHEM 161L (1) \_\_\_\_\_  
     CHEM 162 and CHEM 162L (1) \_\_\_\_\_

\*The Symbolic Reasoning and Natural Sciences requirements are to be completed by the end of the student's third semester in TPSS

**C. Special Graduation Requirements (0 to 15 credits)**

Hawaiian, Asian & Pacific(H) \_\_\_\_\_  
 Contemporary Ethical Issues (E) \_\_\_\_\_  
 Oral Communications (O) \_\_\_\_\_  
 Writing Intensive (W) (5 courses, 2 upper division) \_\_\_\_\_  
 (TPSS 200 & TPSS 492, PEPS 421, plus 2 others) \_\_\_\_\_

The Contemporary Ethical Issues (E) requirement will be satisfied by taking any one of the following:  
 CMB 351/BIOL 340 Genetics, Evolution and Society  
 MBBE/BIOL 304 Biotechnology: Science and Ethical Issues  
 PEPS 310 Environment and Agriculture  
 PEPS 350 Invasive Pest Species  
 PEPS 451 Environmental Law  
 TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology

**II. College Requirements (CTAHR) (7 or 8 credits)**

\_\_\_\_ NREM 310 Statistics in Agriculture Or \_\_\_\_ FAMR 380 & 380L Research Methodology  
 \_\_\_\_ TPSS 492 Internship (1) And \_\_\_\_ TPSS 492L W Internship Field Experience

**III. TPSS Core Requirements (21 credits)**

\_\_\_\_ BIOL 265 Ecology and Evolutionary Biology  
 \_\_\_\_ PEPS 421 W Foundations of Pest Managmt (4) \_\_\_\_ TPSS/PEPS 499 Directed Research (3)  
 \_\_\_\_ TPSS 200 W Tropical Crop Science \_\_\_\_ TPSS 304 Fundamentals of Soil Science (4)  
 \_\_\_\_ TPSS 470 /470L (1) Plant Physiology

**IV. TPSS Requirements for this major specialization (32 credits)**

**Group A. Fundamental courses**

**(Complete all 5 courses, 17 credits)**

\_\_\_ PEPS 363 General Entomology (3) & Lab (1)    \_\_\_ PEPS 405 Plant Pathogens & Disease (4)

\_\_\_ TPSS 354 Tropical Landscape Planting Design Studio

\_\_\_ TPSS 463 Irrigation & Water Management    \_\_\_ TPSS 481 Weed Science

**Group B. Design & Practice courses**

**(Select courses from the following for 15 credits minimum)**

\_\_\_ ARCH 442 Introduction to Urban Design

\_\_\_ ART 113 Introduction to Drawing

\_\_\_ BOT 440 Advanced Ethnobotany

\_\_\_ BUS 312 Principles of Marketing\*

\_\_\_ GEOG 309 Plants, People and Ecosystems

\_\_\_ GEOG 330 Culture and Environment

\_\_\_ SOC 301 Survey of Urban Sociology

\_\_\_ TPSS 369 Ornamental Plant materials

\_\_\_ TPSS 341 Agribusiness Accounting & Financial Analysis\*

\_\_\_ TPSS 350 Tropical Landscape Practices

\_\_\_ TPSS 351 Enterprise Management\*

\_\_\_ TPSS 352 Landscape Architecture History,  
Theory & Practice

\_\_\_ TPSS 353 Landscape Graphics Studio

\_\_\_ TPSS 354 Tropical Landscape Planting Design  
Studio

\_\_\_ TPSS 409 Cultural Geography

\_\_\_ TPSS 421 Tropical Seed Science (2)

\_\_\_ TPSS 429 Spreadsheet Modeling for Business  
& Economic Analysis\*

\_\_\_ TPSS 430 Nursery Management

\_\_\_ TPSS 440 Tissue Culture & Transformation

\_\_\_ TPSS 431 Cropping Systems

\_\_\_ TPSS 453 Plant Breeding & Genetics

\_\_\_ TPSS 491 Experimental Topics (variable credit)

\_\_\_ TPSS 473 Postharvest Physiology

\_\_\_ TPSS 499 Directed Study (variable credit)

\_\_\_ Any non-introductory MBBE, ARCH, NREM, PEPS, GEOG, BOT, MET/ATMO, ACC, BUS,  
CHEM or PHYS course, or any other TPSS course with approval of the undergraduate academic advisor.

\* Students who complete these four courses will earn a Certificate in Agribusiness Management: TPSS 341, 351, 429 and BUS 312

**Total Credit Requirement: 120**

*Proposed for Fall 2016*

<u>Credit summary</u>	<u>Credits</u>	<u>% of 120</u>
UHM            core	40	33.3
CTAHR        core	8	6.7
TPSS            core	21	17.5
TPSS            Landscape specialization	32	26.7
Special graduation & unrestricted electives	<u>19</u>	<u>15.8</u>
Total	120	100



**Tropical Plant & Soil Sciences  
University of Hawaii at Manoa**

**Advising Checklist for Invasive Species Management**

Student \_\_\_\_\_

UH ID \_\_\_\_\_

All courses are 3 credits, unless otherwise indicated.

**I. University Core Requirements (UHM) (40 credits)**

A. Foundations

Written Communication (ENG 100) \_\_\_\_\_  
 Symbolic Reasoning\* (MATH 140 or NREM 203) \_\_\_\_\_  
 Global & Multicultural Perspectives (6 cr.) \_\_\_\_\_

B. Diversification

Arts, Humanities & Literature (6 cr.) \_\_\_\_\_  
 Social Sciences (6 cr.) \_\_\_\_\_  
 Natural Sciences (16)\*  
     BIOL 171 and BIOL 171L(1) \_\_\_\_\_  
     BIOL 172 and BIOL 172L(1) \_\_\_\_\_  
     CHEM 161 and CHEM 161L (1) \_\_\_\_\_  
     CHEM 162 and CHEM 162L (1) \_\_\_\_\_

\*The Symbolic Reasoning and Natural Sciences requirements are to be completed by the end of the student's third semester in TPSS

C. Special Graduation Requirements (0 to 15 credits)

Hawaiian, Asian & Pacific(H) \_\_\_\_\_  
 Contemporary Ethical Issues (E), see choices below \_\_\_\_\_  
 Oral Communications (O) \_\_\_\_\_  
 Writing Intensive (W) (5 courses, 2 upper division) \_\_\_\_\_  
 (TPSS 200 & TPSS 492, PEPS 421, plus 2 others) \_\_\_\_\_

The Contemporary Ethical Issues (E) requirement will be satisfied by taking any one of the following:  
 CMB 351/BIOL 340 Genetics, Evolution and Society  
 MBBE/BIOL 304, Biotechnology: Science and Ethical Issues  
 PEPS 350 Invasive Pest Species  
 PEPS 310 Environment and Agriculture  
 PEPS 451 Environmental Law  
 TPSS 416 Introduction to Social, Ethical, and Political Issues Associated with Biotechnology

**II. College Requirements (CTAHR) (7 or 8 credits)**

\_\_\_\_ NREM 310 Statistics in Agriculture Or \_\_\_\_ FAMR 380 & 380L Research Methodology  
 \_\_\_\_ PEPS 495 Capstone (4)

**III. TPSS Core Requirements (21 credits)**

\_\_\_\_ BIOL 265 Ecology and Evolutionary Biology  
 \_\_\_\_ PEPS 421 W Foundations of Pest Managmt (4) \_\_\_\_ TPSS/PEPS 499 Directed Research (3)  
 \_\_\_\_ TPSS 200 W Tropical Crop Science \_\_\_\_ TPSS 304 Fundamentals of Soil Science (4)  
 \_\_\_\_ TPSS 470 /470L (1) Plant Physiology

**IV. TPSS Requirements for this major specialization (32 credits)**

**Group A. Fundamental courses**

**(Complete all 6 courses, 20 credits)**

- |  |   |
|--|---|
| <input type="checkbox"/> PEPS 350 Invasive Pest Species          | <input type="checkbox"/> PEPS 363 and 363L (1) General Entomology & Lab |
| <input type="checkbox"/> PEPS 405 Plant Pathogens & Disease (4)  | <input type="checkbox"/> PEPS 430 Plant Disease Management              |
| <input type="checkbox"/> PEPS 422 Biocontrol of Invasive Species | <input type="checkbox"/> TPSS 481 Weed Science                          |

**Group B. Electives for this major specialization**

**(Select courses from the following for 12 credits minimum)**

- |  |  |
|--|--|
| <input type="checkbox"/> GEOG 388 Introduction to GIS                              | <input type="checkbox"/> PEPS 371 Genetics: Theory to Application                  |
| <input type="checkbox"/> PEPS 310 Environment and Agriculture                      | <input type="checkbox"/> PEPS 451 Environmental Law                                |
| <input type="checkbox"/> PEPS 418 Turf Pest Management (4)                         | <input type="checkbox"/> PEPS 410 Sustainable Plant and Soil Health Management (2) |
| <input type="checkbox"/> PEPS 410 Sustainable Plant and Soil Health Management (2) | <input type="checkbox"/> PEPS 486 Insect Microbe Interactions                      |
| <input type="checkbox"/> PEPS 463 Urban Pest Management                            |  |

Any non-introductory MBBE, NREM, PEPS, GEOG, BOT, MET/ATMO, ACC, BUS, CHEM or PHYS course, or any other TPSS course with approval of the undergraduate academic advisor.

**Total Credit Requirement: 120**

*Proposed for Fall 2016*

<u>Credit summary</u>	<u>Credits</u>	<u>% of 120</u>
UHM core	40	33.3
CTAHR core	8	6.7
TPSS core	21	17.5
TPSS Invasive Species Management specialization	32	26.7
Special graduation & unrestricted electives	<u>19</u>	<u>15.8</u>
Total	120	100



UNIVERSITY  
of HAWAII  
MĀNOA

RECEIVED

16 MAY 12 P3:41

April 26, 2016

UNIVERSITY OF HAWAII  
PRESIDENT'S OFFICE

MEMORANDUM

TO: David Lassner  
President

VIA: Robert Bley-Vroman *Robert Bley-Vroman*  
Chancellor

VIA: Reed Dasenbrock *Reed Dasenbrock*  
Vice Chancellor for Academic Affairs

FROM: Maria Gallo *Maria Gallo*  
Dean and Director for Research and Cooperative Extension

SUBJECT: REQUEST TO STOP-OUT ADMISSIONS FOR BACHELOR OF SCIENCE IN  
PLANT AND ENVIRONMENTAL PROTECTION SCIENCES

SPECIFIC ACTION REQUESTED:

It is requested that admission to the BS in Plant and Environmental Protection Sciences be stopped-out for the period beginning with the approval of this request and continuing until July 1, 2021.

RECOMMENDED EFFECTIVE DATE:

It is requested that the stop-out be effective upon approval of this request and continue until July 1, 2021.

ADDITIONAL COST:

No additional cost.

PURPOSE:

The purpose of this action is to prepare for the termination of the BS degree in Plant and Environmental Protection Sciences by stopping admission to the degree program but allowing existing students to complete their degree.

BACKGROUND INFORMATION:

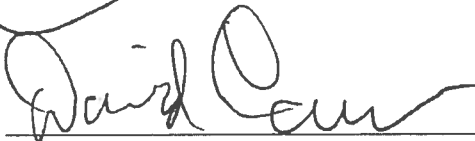
Under Board of Regents policy Chapter 5: Academic Affairs, Section 5-1: Instructional Programs, Paragraph F, an admission stop-out to a program for more than two years is delegated to the President.

The BS in Plant and Environmental Protection Sciences degree program has been operating since 2001. In the past 15 years, enrollment in that program has never reached 30, and the program routinely is classified as a "small program." The faculty in Plant and Environmental Protection Sciences will offer courses in plant protection in an expanded Tropical Plant and Soil Sciences undergraduate program.

ACTION RECOMMENDED:

It is recommended that admission to the BS in Plant and Environmental Protection Sciences be stopped-out for the period beginning with the approval of this request and continuing until July 1, 2021.

APPROVED / DISAPPROVED



David Lassner

20 May 2016  
Date

c: Risa E. Dickson, Executive Vice President for Planning and Policy  
Mark Wright, Chair

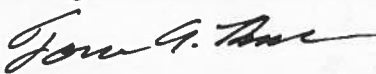


UNIVERSITY  
of HAWAII  
MĀNOA

Colleges of Arts and Sciences  
College of Natural Sciences  
Office of the Dean

DATE: 5 December 2016

TO: Rachel Novotny  
Interim Dean  
College of Tropical Agriculture and Human Resources

FROM: Tom A. Ranker   
Interim Associate Dean  
College of Natural Sciences

SUBJECT: New Name for TPSS

The College of Natural Sciences is in support of changing the name of the Department of Tropical Plants and Soil Sciences to the Department of Tropical Agriculture and the Environment.



UNIVERSITY  
of HAWAII  
MĀNOA

Department of Biology

MEMORANDUM

**To:** Rachel Novotny  
Interim Dean, College of Tropical Agriculture and Human Resources

**From:** Andrew Taylor  
Chair, Department of Biology

A handwritten signature in black ink that reads 'Andrew Taylor'.

**Date:** 1 December 2016

**Re:** program name change

I support the proposal to change the name of the TPSS undergraduate program to Tropical Agriculture and the Environment. Helen Spafford and I discussed the plans for this renamed program. I share her expectation that this change will be beneficial to the program and its students, as well as to the TPSS and PEPS departments.



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DEPARTMENT OF BOTANY  
3190 MAILE WAY, Room 101  
UNIVERSITY OF HAWAII AT MĀNOA  
HONOLULU, HAWAII 96822 USA

DATE: 22 November 2016

TO: Rachel Novotny  
Interim Dean of the College of Tropical Agriculture and Human Resources

FROM: Alison Sherwood  
Chair, Department of Botany

RE: Support for naming of PEPS/TPSS undergraduate program

I am writing to express my support for the proposed name for the new, merged undergraduate program in PEPS/TPSS – “Tropical Agriculture and the Environment”. The name has no conflict with the undergraduate degree programs of the Department of Botany, College of Natural Sciences.

## Wong, Debbie

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**From:** Wong, Debbie  
**Sent:** Friday, November 18, 2016 8:33 AM  
**To:** chowhojr@hawaii.edu; 'Deena M. Yamamoto'; 'Karen Ikoma'; Lily Wong (lilywong@hawaii.edu)  
**Subject:** CTAHR Acting Interim Dean & Director: Dec. 5-13, 2016

Good morning,

Dr. Rachel Novotny, Interim Dean and Director, will be away from the office Dec. 5-13, 2016 for the following engagements. She will return to the office on Dec. 14, 2016.

Dec. 5-10, 2016: Invited by the Pacific Island Health Officers Association (PIHOA) as a guest lecturer/trainer for the PIHOA Pacific Child Health & Obesity Research Project's Anthropometric Measurement Standardization Training for the Palau Maternal Child Health Workforce Training Course.

Dec. 11-13, 2016: Invited by the Northern Marianas College as a guest lecturer/trainer in their partnership activity with the Headstart program, to develop a health monitoring system.

During Interim Dean Novotny's absence, the following will have authority to sign documents on her behalf during the dates indicated in parentheses.

Associate Dean Ken Grace (Dec. 5-8, 2016)  
Associate Dean Charles Kinoshita (Dec. 5-9, 2016)  
Interim Associate Dean Kelvin Sewake (Dec. 12-13, 2016)

Please contact me if there are any questions. Thank you and have a nice weekend!

Debbie

Deborah Wong, Secretary  
**Office of the Dean and Director for Research and Cooperative Extension**  
College of Tropical Agriculture & Human Resources  
3050 Maile Way, Gilmore Hall 202  
University of Hawai'i at Mānoa  
Honolulu, HI 96822

Telephone: (808) 956-4141





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College of Tropical Agriculture and Human Resources  
Office of Academic and Student Affairs

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MANOA OFFICE OF ACADEMIC AND STUDENT AFFAIRS

**MEMORANDUM**

DATE: November 23, 2018

TO: Dr. Michael Bruno, Interim Vice Chancellor  
Academic Affairs and Vice Chancellor for Research

FROM: Dr. Ania Wieczorek, Associate Dean  
Academic and Student Affairs, CTAHR 

SUBJECT: Change of Tropical Agriculture and the Environment B.S. Degree Specialization names

There are five identical areas of specialization for the B.S. TAE program. I would like to request changes to the names of three of the specialization areas:

These are the current names:

1. Environmental Soil Science\*
2. Invasive Species Management
3. Landscape Horticulture
4. Plant Physiology and Genetics
5. Plant Production and management\*


These are the proposed changes to three of the specialization names:

1. Pest, Pathogens, and Invasive species (#2 in above list)
2. Environmental Urban Horticulture (#3 in above list)
3. Plant Sciences (#4 in above list)

The one's marked in asterisks have no changes.

EFFECTIVE DATE: Fall 2019

Approved/Disapproved:

  
Michael Bruno  
Interim Vice Chancellor for Academic Affairs  
and Vice Chancellor for Research

  
Date

3050 Maile Way, Gilmore Hall 119 Honolulu, Hawaii 96822  
Phone: 808-956-6997 E-mail: acadaff@ctahr.hawaii.edu  
www.ctahr.hawaii.edu  
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of HAWAII  
SYSTEM

Wendy Pearson <pearsonw@hawaii.edu>

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## Re: Effective Date: TAE Degree Specialization Names

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Anna Wieczorek <ania@hawaii.edu>

Mon, Dec 3, 2018 at 1:37 PM

To: Wendy Pearson <pearsonw@hawaii.edu>

Cc: "Robert E. Paull" <paull@hawaii.edu>, Ken Leonhardt <leonhard@hawaii.edu>, Koon-Hui Wang <koonhui@hawaii.edu>, AcadAff <AcadAff@ctahr.hawaii.edu>

Thank you, Wendy.  
That sounds great!

Ania

### Ania Wieczorek, PhD.

Associate Dean for Academic and Student Affairs (Interim)  
College of Tropical Agriculture and Human Resources

3050 Maile Way, Gilmore Hall 211

University of Hawai'i at Mānoa

Honolulu, HI 96822-2231

Phone: 808-956-6997

Principal Investigator and Director Gene-ius Day Program

<<http://www.ctahr.hawaii.edu/geneius-day/>>

On Dec 3, 2018, at 12:49 PM, Wendy Pearson <pearsonw@hawaii.edu> wrote:

Aloha Ania,

I have the requests to rename 3 of the TAE specializations, and to have all specializations appear on the transcript. Given that it is now November, the earliest recommended effective date is Fall 2019, to coincide with Catalog changes.

Let me know if this is acceptable.

### Wendy L. Pearson, Program Officer

Office of the Vice Chancellor for Academic Affairs

University of Hawai'i at Mānoa

2500 Campus Road, Hawaii Hall 209

Honolulu, HI 96822

(808) 956-6145 / FAX (808) 956-7115

<http://www.manoa.hawaii.edu>