Department of Natural Sciences
Minutes for the October 26, 2012 Meeting
Imiloa 122

Members Present: Joe Ciotti, Dave Krupp, Dave Ringuette, Inge White, Ross Langston, John Kaya, Sam Craddock, Brad Porter, Lisa Hayashi, Marv Kessler, Allison Beale, Letty Colmenares.

Guest Present: Cliff Togo

Member Absent: Floyd McCoy

1. Approval of Minutes. The minutes of the Sep 21 meeting posted on the website was approved.

2. Goal Setting. The department goals for AY 2011-12 were reviewed and updated. One new goal was identified. The final narrative on goals is attached (attachment 1). This will be part of the NS Annual Report.

3. Imiloa Repairs & Maintenance. Cliff Togo answered questions about the planned construction, repair and maintenance of the following:
   a. VT Facility Construction will start in Spring 2013 and finish around Fall 2013. The bidding will start soon.
   b. Skylight Replacement will start in Spring 2013. A false ceiling will be built to isolate the area under repair. In addition to skylight replacement, a catwalk around the peripheral of the skylight will be built to allow repair and cleaning. The job will also include exterior wall painting of the entire building and roof leak repairs.
   c. Uluwehi Flood Mitigation Plan is already prepared and revised. More swales are going to be constructed leading to the golf course.

4. Equipment request prioritization. Department members prioritized the equipment requests, as follows:

   1st Clickers (4 units) approx. $20,000 .............. 2.3 points
   2nd Water bath (10) replacement $8,500 .......... 2.9 points
   3rd AC replacement Bioprocessing $6,000 ...... 3.1 points
   4th FTIR spectrometer $20,000 .................... 3.3 points
   5th Electron detector $31,500 ..................... 3.4 points

   After the meeting, Inge White found out that her AC request to Admin has already been funded and withdrew her request. The final NS department prioritized equipment request list is attached (attachment 2). This will be part of the NS Department Annual Report.

5. PBC requests. The summary table is attached (attachment 3). Prioritization was not done since the PBC will re-prioritize the items anyway. Each PBC
request must have a justification, as in Gen Ed SLO, AA SLO, Certificate/ASC reference and implementation date. The PBC requests will be part of the NS Annual Report and will also be posted in the PBC website.

6. AG sustainability program and new course AG 171 proposal (D. Ringuette). The proposed program (attachment 4) and AG 171 new course proposal (attachment 5) were approved unanimously.

7. Classification of NS courses (AS, BS and PS). At this point, since there is no compelling reason to change, the classification will remain the same.

8. Summer 2013 Schedule. The summer schedule is due Nov 14. The summer schedule will be published by the start of Christmas break. Policy regarding summer scheduling was distributed by email.

9. Next NS department meeting will be on Nov 16, 2012.

ATTACHMENT 1 (Goal Setting)
NS Department Goals AY 2012-13

<table>
<thead>
<tr>
<th>AY 2011-12 Goals</th>
<th>Status AY 2012-13</th>
</tr>
</thead>
</table>
| **Goal 1:** BoR approval of AS in Veterinary Technology  
*Addresses:* UH System goals 4.1, 4.3; WCC goals 4.1, 4.5, 4.6, 4.8; President’s graduation initiative. The purpose of this goal is to upgrade the current CA in Veterinary Assisting to an AS in Veterinary Technology, thus providing a higher level of training and an opportunity for a better-paying career for our graduates.  
*Measurable Outcomes:* Initiate the degree by Spring, 2012 *(COMPLETE)*; graduate 6-15 students when degree is fully underway *(ONGOING)*. | **Partially Completed.** The A.S. in Veterinary Technology was approved by the BOR in February, 2012. Admissions to the first stage of the program (certificate of achievement in veterinary assisting) have been greater than expected (ca. 56 students enrolled in introductory classes in Fall, 2012). We expect 4-5 continuing students (those who had already completed the first year of the degree) to graduate with the A.S. degree in May 2013 and another 20-25 to begin the second year of the program in June, 2013. The program is slotted for a site visit from the AVMA accreditation team in Spring, 2013. Assuming the site-visit is successful, we anticipate accreditation will be awarded in August 2013. |
| **Goal 2:** BoR approval of CA in Agripharmatech - Track 1: Plant Biotechnology, and Track 2: Ethnopharmacognosy | **Partially Completed.** The CA in Agripharmatech was approved by the Board of Regents on May 17, 2012. The program offering commences in Fall 2012. Approximately 12 students are expected to complete the program by Spring 2013. The program is being funded by USDA-NIFA and C3T grants. |
| Address: UH System goals 4.1, 4.3; WCC goals 4.1, 4.5, 4.6, 4.8; President’s graduation initiative. The purpose of this goal is to upgrade current ASC students to a full, BoR-approved Certificate of Achievement, thus significantly improving the graduates’ opportunities for obtaining careers in high-wage, high demand areas, or becoming agribusiness entrepreneurs, or transferring to baccalaureate programs at UHM or elsewhere.  
**Measurable Outcomes:** Initiate the certificate by Spring, 2012; graduate 6-11 students annually when program is fully operational. |
| **Goal 3:** Complete curriculum for Certificate of Completion in Sustainable Agriculture; offer first classes | **In progress.** Two more new courses (Renewable Energy and Ag Entrepreneurship) need to be completed. Then the Certificate of Completion curriculum will be developed. The first classes will be offered in Fall, 2013. |
| Address: UH System goals 4.1, 4.3; WCC goals 4.1, 4.3, 4.7  
**Measurable outcomes:** Certificate program will offer initial classes by Fall, 2012; first graduates by May, 2013; program will grant 5-8 certificates annually, plus provide training for 20 non-certificate seeking students annually. |
| **Goal 4:** Complete an ATP for AS in Natural Science  
*Addresses:* UH System goal 4.3; WCC goals 4.1, 4.5, 4.8;  
The purpose of this goal is to improve the graduation and transfer rates of students who plan to major in a natural science discipline;  
KCC research indicates that the AS in NS is more appropriate for such students than an AA degree.  
*Measurable Outcomes:* Initiate the degree by Spring 2013; over the next four years at least 25 students will earn an AS in NS. | **In progress.** The ATP for ASNS was completed in Spring 2012. The next steps would be:  
1- develop the ASNS curriculum  
2- apply for BOR approval in 2013.  
This will be done jointly with Honolulu CC, Kauai CC and Hawaii CC. |

| **Goals 5:** Certificate of Completion (CC) in Astronomy and Space Exploration by Summer 2012  
*Addresses:* UH System goal 4.3; WCC goals 4.1, 4.5, 4.8;  
The purpose of this goal is to establish Aerospace Opportunities for Underrepresented Learners and Instructors (AOULI) project that expands STEM-based undergraduate learning experiences in aerospace science, especially for underrepresented students, as well as supports instructor and infrastructure development in this area.  
*Measurable Outcomes:* 5-6 certificates annually, several interns are participating in the UH pre-engineering program. | **In progress.** Goal 5 was placed on temporary hold while AERO 150 (Introduction to Rocketry) was being developed. This course is required to complete the offerings in the “Space Exploration” track of this certificate. Once this course is officially approved, the proposal for this certificate will be revamped and submitted for approval.  
**Revision of Goal 5 for this year’s report**  
**Goals 5:** Certificate of Completion (CC) in Astronomy and Space Exploration by Fall 2013  
*Measurable Outcomes:* 5-6 certificates annually, several interns are participating in the UH pre-engineering program. |
**Goal 6:** Certificate of Competence in Plant-Food Production and Technology  
*Addresses:* UH System goals 4.1, 4.3; WCC goals 4.2, 4.3, 4.4, 4.5, 4.6  
*Measurable outcomes:* first graduates by Fall 2012; program will grant 5-8 certificates annually, plus provide training for 20 non-certificate seeking students annually.  

**In progress.** The CoC in Plant Food Production and Technology will start immediately after approval. Three to six graduates are expected by Spring 2013. The program is supported through Perkins grant.

New goal added for AY 2012-13.

**Goal 7:** Investigate whether the Polynesian Voyaging program should be relocated back in the Natural Sciences Department  
*Addresses:* UHCC Action Outcomes 5.2, 5.4 and 5.5; WCC strategic goal 5.4  
*Measurable outcomes:* acquire approval to transfer Polynesian Voyaging program from Humanities back to Natural Sciences; re-establish DP credit for IS 160 and IS 260; establish a separate account to fund the annual maintenance of the canoes used in this program.

**ATTACHMENT 2**  
*Departmental Equipment Replacement List*  
*For Program Reviews and Support for Equipment Funds*

<table>
<thead>
<tr>
<th>Priority Number</th>
<th>Description of Item</th>
<th>Year (or Est.)</th>
<th>Year to Replace</th>
<th>Quantity</th>
<th>Unit Cost (to replace)</th>
<th>Total Cost (&gt; $1,000)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Clickers (CPS system) replacement</td>
<td>ca. 2007</td>
<td>2012-13</td>
<td>4</td>
<td>5,000</td>
<td>20,000</td>
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<td>2</td>
<td>Water Bath replacement</td>
<td>1997</td>
<td>2012-13</td>
<td>10</td>
<td>850</td>
<td>8,500</td>
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<td>3</td>
<td>FTIR spectrometer</td>
<td>new</td>
<td>2012-13</td>
<td>1</td>
<td>20,000</td>
<td>20,000</td>
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<tr>
<td>4</td>
<td>Electron Detector</td>
<td>new</td>
<td>2012-13</td>
<td>1</td>
<td>31,500</td>
<td>31,500</td>
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</tbody>
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Date Prepared: 10/26/2012