18. Justification

1. **What is the course modification?**

   N/A Please refer to Question 2.

2. **Why is this course being requested or modified?**

   The Department of Tropical Plant and Soil Sciences has aimed to understand plant and soil issues important to Hawaii and other tropical areas of the world. Classes offered by the Department focus on an understanding of the interactions among plants, soil, water and air in different settings. An appreciation of these interactions requires an integration of diverse activities, to understand and responsibly manage land.

   In addition in understanding these interactions of tropical agriculture, there has been an increase in another sector of agriculture that has not been fully addressed at the university level, and that is urban agriculture. Specifically, urban agriculture includes landscape design, installation, and maintenance. In order to address the increase of urban populations in Hawaii, a sustainable balance between urban and natural areas needs to be implemented. To do this, the landscape industries of Hawaii must have the latest research and workers to achieve this balance. At the center of the landscape industry is design, and currently, the State does not provide education for landscape design at this level. With no landscape architecture program in the State, this course is not only in high demand, but is essential in beginning to address the changing agriculture landscape in Hawaii. Also, meetings with the LICH (Landscape Industry Council of Hawaii), ASLA (American Society of Landscape Architects, Hawaii Chapter, along with students of TPSS 350 (Tropical Landscape Maintenance and Installation) has revealed a strong desire and need for this proposed course.

3. **How will the content be organized?**

   The proposed course emphasizes students’ learning practical skills of landscape communication graphics and planting design and consists of lecture (50 minutes per week, and 6 hours of lab per week) for a total of 3 credits. The lecture will entail the basic concepts of graphic communication theory and planting design elements and theory, technical terms and practical knowledge. The lab portion is designed for students to practice and gain the needed skills to develop sustainable and functional landscape designs. Each lab exercise covers the same materials presented in lecture. The course will be organized with 1) an introduction of the importance of landscape design based on temporal, sociocultural, and geospatial parameters; 2) basic graphic design tools and their use; 3) development of drafting and landscape design communication skills; 4) Basic design principles and theories; 5) Elements of landscape design; 6) application of graphic communication and landscape design parameters with a focus of tropical plant material. A draft of the syllabus is attached.
4. What other courses at UHM closely parallel the proposed course and in what way will the latter make a distinct contribution?

There are currently no landscape graphics or planting design courses being offered. Discussions with Associate Dean, Joyce Noe indicated there is a strong interest in making different cross listed design related elective courses for the Architecture curriculum. This course was developed with this in mind, in addition to the need of TPSS students.

5. Where or how does the proposed course fit into the current and future curriculum?

Teaching a new undergraduate course on Tropical Landscape Planting Design and Graphics will help support Tropical Plant and Soil Science (TPSS) department to offer an option in its curriculum to address the high in demand courses work relating to Hawaii’s landscape industry. The development of such a course offers students the skills needed to not only help them secure a job, but to help Hawaii establish a more sustainable environment through landscape design, installation and maintenance.

6. Why is the number of credits and level justified? Explain the prerequisites and the absence thereof.

Through lecture and design studio formats, theoretical design concepts will develop functional and sustainable landscape planting designs which take into account the sociocultural, economic, artistic, environmental and aesthetic qualities of the built and natural landscape. Students will develop basic skills of landscape graphic communication to clearly articulate the ability to think, analyze and extend a physical solution in the proper scale through the design process in the tropics.
Lecture course: 50 minutes of contact per week = 1 credit hour;  
Laboratory sessions: 150 (50 x 3) minutes of contact per week = 1 credit hour;  
The proposed course, TPSS 352, is a 3 credits, combined lecture-studio (lab) course:  

Lecture part: 50 minutes of contact per week = 1 credit hour  
Studio part: 300 minutes of contact per week = 2 credit hours  
Total: = 3 credit hours  
Since this course is an upper division course, the following are prerequisites to TPSS 352:  

- TPSS 350 Tropical Landscape Practices  
  In order to become a successful designer, one needs to have an adequate understanding of landscape installation and maintained practices. TPSS 350 will give students the basic theoretical and practical application which will allow their designs to be sustainable as well as functional.  

- TPSS 369 Ornamental Plant Materials  
  Plants are a dynamic component of the landscape and often taken for granted or not understood. Have a strong background in plant material knowledge will allow a designer to make their designs to be sustainable as well as functional.  

7. How will the course assist students to achieve the critical skills and competencies expected of CTAHR graduates?  

Written Communication  
Students will be given graphic assignments which include graphic as well as text explanations. Feedback on these graphic assignments will be provided.  

Oral Communication  
Students will be required to present their designs and justify their design rationale.  

Analytical Problem Solving  
Students will be asked to complete a final design project that requires them to use analytical, artistic, social, and scientific problem solving. In addition, course content will cover these areas.  

Personal Characteristics  
Students are expected to participate in class. Many in-class activities and exercises will be conducted and evaluated to allow students to practice these competencies.  

Human Relations Skills  
Students are expected to participate in class. Many in-class activities and exercises will be conducted and evaluated to allow students to practice these competencies.  

“Real World” Experience  
Group and individual assignments will be given to provide “real world” experience. Within the design and landscape professions, people work as a team, and this course directly teaches these skills.
Business Management Skills
Course content will cover this topic, allowing students to comprehend on a practical level the impact of proper design implementation.

Leadership Skills
Course content will cover this topic, while in-class activities and exercises will provide opportunities to practice.

Computer Skills
Computers will not be used in this course.

Global Perspective
Students will be exposed to environmental, social, and economic awareness through environmental and social impacts.

8. How will students be evaluated?

Students learning accomplishments will be evaluated by graphic assignments (25%), planting design Projects (40%), and a final design project (35%). These will be used to evaluate students’ understanding and developed skills of the subject matter, including problem solving skills, graphic communication skills, and an understanding of the theoretical constructs needed to generate sustainable designs.

9. What are the minimum qualifications for teaching this course? Is a qualified instructor now available?

Andy Kaufman ASLA, MLA, Ph.D is now available to teach the course and taught an introductory portion of this proposed class content in TPSS 350. The course requires someone who works has a landscape design background, preferable a landscape architect with a horticultural and social science background.

10. How will the course be financed, assuming no further cutbacks?

An effort will be made to see the feasibility of using architecture design studios for the lab portion of this course.

11. Has the course been offered before? Is there a demand for it?

No, this course has not been offered in recent years. In the 1970’s there were landscape design courses offered, but these have been removed. When TPSS 350 course was offered in Spring 2006, 12 students were enrolled. Comments made by these students during the evaluation process indicated that they wanted a course concentration on landscape graphics and design. This course content is valuable and would benefit upper division undergraduate and incoming graduate students. Many undergraduate students and community members have also expressed interest in taking an upper division landscape design course.

12. Is the course cross-listed with another department?

N/A