



**CERTIFICATE in PLANT TISSUE CULTURE**  
Effective Spring 2002

<b>STUDENT NAME:</b>		<b>ADVISOR NAME:</b>	
<b>CERTIFICATE DESCRIPTION:</b>			
<p>The program for the Certificate in Plant Tissue Culture is designed to prepare students for employment in the plant tissue culture industry. It focuses on course work that relates directly to this industry and facilitates immediate employment as laboratory proprietors, laboratory supervisors and laboratory technicians. The curriculum includes a range of plant science and tissue culture courses that provide a strong theoretical base. Additionally, the student must complete 6 credit hours of Advanced Plant Tissue Culture, primarily a hands-on laboratory oriented course.</p>			
<b>CERTIFICATE REQUIREMENTS:</b>			
<p>A certificate may be pursued either in addition to a baccalaureate degree program or as a program objective by itself. In order to pursue a certificate, a student must either have a bachelor's degree or be a classified student (a candidate for a degree). Students in the Plant Tissue Culture Certificate Program must complete the prescribed courses (18 credits) with a cumulative GPA of 2.0 or better.</p>			
COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SEM/YR COMPLETED
<b>HORT 262</b>	<b>Principle of Horticulture</b> (2 lec, 1 lab) Introduction to the various divisions of horticulture and the relationship of plants to environment. Plant structure and function. Opportunity for observations and practice of various horticultural technologies. Students are required to participate in a garden project.	3	
<b>HORT 264</b>	<b>Plant Propagation</b> (2 lec, 1 lab) Seminal propagation; vegetative propagation by cuttings, grafting, budding, layering, division and separation. Propagating systems and plant tissue culture.	3	
<b>HORT 303 or HORT 403</b>	<b>Introduction to Plant Tissue Culture</b> (2 lec, 1 lab) Introduction to the basic concept and principles of tissue culturing plants. Special emphasis will be placed on setting up a laboratory and other business concerns. <i>Limited enrollment. Prerequisite: HORT 262; CHEM 124 or consent of instructor; recommended: HORT 264.</i>	3	
<b>HORT 304</b>	<b>Plant Tissue Culture Acclimatization</b> (2 lec, 1 lab) Discussion and application of methods employed to acclimate locally tissue cultured plants. <i>Limited enrollment. Prerequisite: HORT 262; recommended: HORT 303.</i>	3	
<b>HORT 450</b>	<b>Advanced Plant Tissue Culture</b> (2 lec, lab) Provides the student with hands-on experience in plant tissue culture techniques. Evaluative and diagnostic skills will be emphasized. The student will design and test techniques most appropriate for tissue culturing plant(s) of interest. <i>Limited enrollment. Repeatable for a maximum of 6 credit hours. Prerequisite: HORT 303 or 403.</i>	3	
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<b>CONTACT PERSON:</b> Dr. Michael Tanabe, Professor of Plant Science E-mail: <a href="mailto:mtanabe@hawaii.edu">mtanabe@hawaii.edu</a> Phone: (808) 933-0851			