Masters of Agriculture Education

AGED 539

Merced College Botanical Garden

&

Quality Program Criteria

Fall 2014

Cal Poly San Luis Obispo

Bryan Tassey

Masters Committee:

Dr. Robert Flores

Dr. Ann De Lay

Professor Emeritus Dan Lassanske

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Purpose

I began my teaching career part-time for three semesters prior to a full time position. I quickly realized that to have a successful program, you need to have the three rings of Horticulture well represented in physical form on campus. The three rings, in my opinion, are interwoven with the heart of the Horticulture program being the plants, which are produced by a nursery.

While there are still teaching moments with how not to do things, (grounds maintenance on campus) it is just as important to show students what a quality design, installation, and maintenance program looks like. In the central valley there are very few landscaped areas that are held to Horticultural standards. I also realized students in my program want to see and do. Pictures only take you so far in lecture and words certainly don't replace the tactile application of Horticulture. I tested the waters of an idea of a Botanical Garden with the Merced College Administration and was met with overwhelming support of my Dean and Vice President of Instruction. Unfortunately, I was met with an equal opposing force with the Vice President of Administration Services (the business side of the college, including Grounds Maintenance) as she and the Director of Maintenance did not see value in a Botanical Garden. I have the philosophy of , "I only fight battles that I can win" and quickly realized that now was not the right time to push my agenda, however, I did not give up on my dream and worked behind the scenes to move the concept forward.

Objectives:

- **Primary objective of the gardens will be education**
 - Students of Merced College – the garden can serve as a central focus for students of horticulture
 - The community of Merced – provide the opportunity for community residents to learn about and be exposed to plants, the aesthetics, uses, and cultural requirements
- **Merced College Botanical Gardens shall be a welcoming garden that exemplifies the broad agricultural, cultural, and historical qualities of the Merced region**
 - Draw in and include aspects of MERCED that will make the gardens feel regionally and culturally appropriate
 - Strongly encourage local participation by making the gardens representative
 - Find a way to refocus attention to the college of Merced (vs. The new UC Merced) via regionalism
 -
- **Gardens will, as far as practical, be evidence of environmental responsibility**
 - Use regional materials and available regional labor for site improvements
 - Reuse and recycle
 - Regional climate fit – sun, wind, rain, etc.
 - Maintain and enhance site wildlife habitats
- **There shall be a strong connection between the garden as it is situated on the Merced College Campus and the residents of Merced and surrounding communities; establish a strong community relationship**
 - Elementary, middle and high schools
 - Local and regional clubs
 - Community service organizations

Step 1 – Organizing

Find “Strength in numbers.” I have heard about many projects that are never put to paper. Many people struggle thinking they are the only ones that think a certain way. It’s hard to ask for help, let alone actually let someone help you. I quickly realized that I have certain skill sets to bring to this major project and lacked some other pieces to the puzzle. In 2009, I met Dr. Kain, Professor of Science in a “Grant writing for Dummies” workshop before I was hired full time. After a few minutes of awkward avoidance while sitting next to each other we struck up a conversation. At that moment I found a key ally that would serve as a catalyst to begin this adventure that has proven to be much larger in scope and purpose than I have ever imagined. Speed forward a few months and I was hired full time in a tenured faculty position as the Professor of Landscape Horticulture. Then Professor Kain, and now Dean Kain of Science, Math and Engineering and I brought on two other key members of our core group of four. Dr. Estrella, Faculty Lead of Science and my boss, Dean Andersen, Dean of Agriculture, Industrial Technology and Kinesiology. We met approximately ten times to brainstorm, figure out, and navigate the layers of bureaucracy of the college to implement this unique project. They quickly realized I had the passion and tenacity to relentlessly persevere this project and it also helped that I was young enough to see it through. I didn’t know what they meant about my youth being an asset but 6 years later I fully understand. The four of us, two Deans and two Faculty Leads were now in positions to infiltrate the system and push for a project that has huge potential for interdisciplinary collaboration, community involvement, and environmental benefits.

As our dialogue continued we realized we had found out the process to get a project of this size accomplished through our shared governance structure at Merced. It was multi layered and of course, overly complicated.

- Task 1 - Build an army of community supporters for the project and find funding for a preliminary drawing. We found it was hard to explain what we wanted without a drawing, but on the other hand, how do you develop a drawing without knowing the dimensions of the site?
- Task 2 – Once there was community support, take the plan and present to the Facility Master Planning Committee. I did that and was given the thumbs up but I would have to have the Educational Master Plan updated as it drives the Facilities Master Plan of which, they only have the ability to approve.
- Task 3 – Meet with the new Vice President of Business Administration and garner her support.

Step 2- Funding

The next step was to work with my fellow Board Member and close friend, Jim Williamson. I have served on the Board of the Tree Partners Foundation for the past 8 years. Jim is an Urban Forestry activist, respected community member, and a key member of my advisory committee. With his help in leading the fundraising charge, we were successful in attaining \$10,000.00 in startup funds through the County Supervisors. This initial dollar amount allowed me the opportunity to hire Duane Morris who is a Consultant/Designer and Educator. He is retired from teaching Landscape Design at Cal Poly and lives in Washington. I was very lucky in acquiring his services as he is also a certified Landscape Designer through the Association of Professional Landscape Designers and also teaches design via webinars with Dynascope. Duane mentioned that he would also like to bring in and collaborate with Cielo Sichi, a Landscape Architect and Licensed C-27 contractor in the Bay Area and former classmate of mine.

After forming the design team we came up with a list of goals and questions to guide us through a community meeting that was held on January 11th 2011. Duane and Cielo visited the campus the day before to gather some data and interact with students informally and get a feel for the potential location. I coordinated the meeting with approximately fifty community members attending to gain information and provide input. The meeting lasted approximately two hours where Duane and Cielo shared their general thoughts on the design but spent a majority of time getting feedback from community members. The document below served as their outline to for the designers to facilitate the discussion.

Merced Botanic Garden

‘Linking Our Community to Plants’

In our quest to build a garden for our community, we would like to focus on:

- Plants are the basis of life on earth and they maintain a viable urban/rural ecosystem.
- People of all ages from our community will benefit by understanding the value of trees and other plants in their lives.
- Horticulture is a nurturing and creative activity. Plants are a necessary part of the emotional and spiritual well-being of people.
- In our efforts we want to create an atmosphere of excitement, enthusiasm, and interest about plants and the living environment.
- We will strive to provide an educational, enjoyable and welcoming environment to all people.

Additional ideas/thoughts to include

Our project goals:

- ❖ A hands on living laboratory for students to apply what they have learned
- ❖ An interactive public display garden held to horticulture standards
- ❖ A place for Master Gardeners and local garden clubs to call home
- ❖ Recruitment tool and public draw to Merced College
- ❖ Meeting place for industry to hold seminars
- ❖ Nature Education for elementary students

Additional ideas/thoughts to include

There are many different aspects/functions that can become the essence of a botanic garden.
Here are a few suggestions:

Education:

Visitor/Education Center
Student Projects
Master Gardener Projects
Education Programs
Educational Signage in the Garden
Public lectures/Talks
Education Booklets/Leaflets
Permanent Public Displays
Special Exhibitions
Guided Tours
Courses and special presentations/talks for
 School age children
 College students
 General public
A place where everyone can learn about plants

Additional Ideas Might Include:

Public and campus activities:

Cultural events to include plays, concerts, festivals
Presentations and talks by professionals in a wide range of related (or unrelated)
 subjects; gardeners, horticulturalists, conservationists, etc.
Arts, crafts and floral exhibits
Garden parties (public and campus)
Weddings, dinners, cocktail parties, community meetings, private/corporate events
Campus club, department and classroom meeting place
Local church activities
Children's events and activities
Plant sales
Local garden club(s) meeting place
Night time activities – The Garden after Dark
Family Nights – multi cultural to include all members of a family
Plant workshops

Additional Ideas Might Include:

Conservation and Research:

- Water conservation
- Energy conservation
- Resource conservation
- Evaluation of plant communities
- Experimental planting design projects
- Research and evaluation of new materials

Botanic gardens house plant collectives that represent plants from just the immediate local to worldwide exhibitions and collections that have gained international fame. The exact content of the plant horticulture is typically defined by project scope, physical area available and intended uses.

Here are a few ideas intended to start a conversation on the types of gardens and plants to be included in the Merced Botanic Garden.

Specialty Gardens might include:

- Butterfly garden, Bird garden
- Rose garden
- Ornamental grass garden
- Mediterranean garden(s) California, Chilean, Australian, S. Africa, Mediterranean region
- Formal gardens (as opposed to informal)
- Bonsai
- New perennials garden
- Ornamental edibles and herb garden
- Horticultural therapy garden
- Green roofs
- Vertical gardens – landscape garden walls
- Water features - pools, ponds, bird baths, waterfalls, etc.
- Conservation gardens – low maintenance a possibility
- Medical and herbal remedies garden
- Fragrant garden
- Gardens oriented to the physically challenged, visually impaired, etc.

Additional ideas might include:

Garden Structures as part of the Botanic Garden

Green houses

Conservatory

Meeting center (up to 50) people

Rest rooms

Gazebo – other structure

Benches

Garden arbors, art and pottery

Additional ideas might include:

Lastly help us in a quest to identify those qualities that make Merced a special place.

What does Merced mean to the people that live there?

What makes Merced different from other towns in California?

Historically, what are important elements that should be kept in mind when building a garden?

Culturally, what one or two ideas would you recommend be incorporated in the garden?

Conceptually, what one or two elements would one strive to include in a Merced Botanic Garden?

Step 3 – Design

Using the “Objectives document” and the “Community Discussion Outline” and direct input from me, the designers were given a budget and full creative release to come up with a design that will meet the goals of the project and serve as a template to pursue approval from the District. I also wanted the design to provide great visual aid, so I could hold future community meetings to garner support.

Some time went by before the designers could fit the project into their schedules. There were a few phone conversations between the time they presented on campus and the time when they met with us via GoTo Meeting (webinar) on their final design and recap of the process. The meeting was attended at Merced College by Dean Andersen, Dean Kaine, Dr. Estrella and remotely by Duane in Washington and Cielo in San Jose. The meeting was exactly three hours long where we gave input and feedback on their design. Overall they exceeded our expectations and a media file was mad available upon request of the committee of the go to meeting.

We were provided with the following plans:

Merced Botanical Garden

College of Merced Draft Master Plan

September 1, 2011 Scale 1" = 40'-0"

Draft suggestions for an Hispanic Garden

Medicinal plants, herbs and vegetables

Plant Name	Symbol
Aloe Vera	[Green circle]
Basil	[Blue circle]
Chamomile	[Yellow circle]
Cilantro	[Red circle]
Echinacea	[Purple circle]
Fennel	[Orange circle]
Ginger	[Pink circle]
Lavender	[Light blue circle]
Mint	[Dark blue circle]
Parsley	[Light green circle]
Rosemary	[Dark green circle]
Sage	[Brown circle]
Turmeric	[Yellow-green circle]
Vanilla	[White circle]

Scale: 1 inch = 1 foot

North Arrow

Project: Merced College Campus
Location: Merced College Campus
Date: September 28, 2023

Merced Botanical Garden
Draft Suggestions
Hispanic Garden

Step 4 – Implementation

Saying that I have had obstacles to overcome with this large project would be an understatement. Over the past 6 years every major administrator from Departments Heads to Deans and all Vice Presidents and the President are new since I started. My Dean taught me a valuable lesson a few years ago and it still holds true today. “If you can’t beat them, you can out live them.” What I thought was a joke to calm me down after a meeting with the Vice President of Business Administration (whom directly oversees grounds maintenance) when I was told that I could not plant trees on campus with my students as I would be taking away union work, turned out to have truth. Little did I know that this VP would not have her contract renewed by the Board of Trustees.

Once the new Vice President of Business started approximately two years ago I quickly realized that now was the time to push for my project. Dr. Shultz not only liked plants but I found out that she is one class away from her associate’s degree in Horticulture. She and I sat down and had a few long discussions on how this project could help the community and campus life. In a short period of time she became my biggest supporter. As Dr. Schultz settled in to her position she quickly realized that the main obstacle in my way was having the Facility Master Plan up to date. While the process is fairly straight forward to have this update happen I realized there was much more to the story. Our campus Educational Master Plan was severely out of date. This plan is more encompassing of the overall structure and future planning of how we as a district will function. Where I hit a block wall is the Educational Master Plan dictates how the Facilities Master Plan will be written and implemented. We first needed to see where our growth would be, and what facilities we would need to provide for that growth. To make things more complicated we had an Interim Vice President of Instruction (VPI) at the time. The VPI is responsible for the Educational Master Plan. By now you have probably figured out where this is going. The VPI didn’t want to try and reinvent the college with an interim position by updating the existing Ed Plan. He could see that this is the change that needed to happen and in my opinion took the responsible approach and opted not to update the Ed plan while in his interim position. This now put the Botanical Garden on hold as I needed a firm location and Board approval on the Facilities Master Plan to go after funding.

A year went by..... Once the New VPI was hired (also a lover of plants) I seized the opportunity to get both Vice Presidents in the same room and come up with a plan to move the project forward. After they both heard my story and what I have gone through they both said “enough is enough,” and vowed to give me a clear path to getting the location solidified. The plan was as follows. We would simply make an Addendum to the Facilities Master Plan which the primary focus would be to include the Botanical Garden. I met with our Capital Planning and Events Manager to get this accomplished. Step one was to meet and present to the Facilities Master Planning Committee. This is now the second time that I have done this, the first was two years prior which gave me the thumbs up to proceed. Thumbs up, got me nowhere fast!! Once the concept of the Botanical Garden was approved, it went on to the Architect who is a consultant for the college. I then had to relive the whole process in a separate meeting to convince him why we needed a Botanical Garden. We hired him right? Why then....I digress. Once the Architect included the garden on paper a major milestone was just passed. I have never been so proud of a green square in my life. See draft one below.

Draft one - Addendum to the Facilities Master Plan

Followed by draft one there was draft two below.

The next steps included my “Getting the word out campaign.” This included a presentation to the following areas of Shared Governance process on campus. First was a simple Agriculture Department meeting which was easy as they already approved the existing Ag land that is currently a horse pasture six years ago. My second meeting was our Agriculture Advisory meeting where I was asked questions and eventually received a unanimous decision in support of the project. Third, was the Academic Senate, followed by the Instructional Council, and the Educational Master Planning Committee where I presented the following Power Point.

The final step will be presented to the Board of Trustees on Tuesday, November 19th. This will solidify a permanent location for the garden and allow for me to apply for grants and garner support from the community and industry.

What is a Botanical Garden?

- ▣ A place where a wide variety of plants are cultivated for scientific, educational, and ornamental purposes.

Dean Andersen
Dean Kain
Dr. Estrella
Tassey

What does one look like?

Who doesn't have one?

To our knowledge, no other Community College.

Creativity is not encouraged...

It's required!!

What is the funding source?

- ▣ Grants – Cal Fire
- ▣ Tree Partners Foundation
- ▣ Donations from Industry
- ▣ Service Clubs
- ▣ Developing an Endowment
- ▣ Private Donations

California Department of
Forestry and Fire Protection

Who's going to maintain the project?

Examples of Interdisciplinary Collaboration and Community Relations Opportunities

Community Involvement

Project Goals

- ❑ Interdisciplinary collaboration
- ❑ A hands on living laboratory for students to apply what they have learned.
- ❑ An interactive public display garden held to horticulture standards.
- ❑ A place for Master Gardeners and local garden clubs to call home.
- ❑ Recruitment tool and public draw to the College.
- ❑ Meeting place for industry to hold seminars
- ❑ Nature Education for elementary students

California Community College
Agriculture/Natural Resources
Quality Program Criteria

Section 1: Quality Program Criteria – INSTITUTIONAL MISSION

A) Programs/Departments planning and decision making is consistent with the college mission statement and is documented in the Agriculture/Natural Resources self-study process.

- Vision - Merced College will provide transformative and empowering educational experiences to meet student and community needs.
- Mission - Merced College serves as a gateway to the future, providing accessible, affordable, and relevant education and workforce training for students in our richly diverse region. The college offers programs of study that lead to transfer, associate degrees, and certificates. Merced College provides basic skills and noncredit courses, as well as community education for personal and professional enrichment.
- Core Values –
 - ❖ *Student Success:* We focus on student access and success.
 - ❖ *Supportive Environment:* We promote an atmosphere of trust where communication and teamwork cultivate a rich environment for teaching and learning.
 - ❖ *Proactive:* We utilize agility, innovation, and responsible risk-taking to create our preferred future.
 - ❖ *Partnership:* We actively engage with the community and community partners to respond to cultural, educational, economic, and technological needs.
 - ❖ *Diversity:* We embrace diversity and equity as community strengths and celebrate these qualities in our institution.
 - ❖ *Self-Reflection:* We strive for continuous improvement based on data-driven self-reflection, objective assessment, and dialogue.
- Motto – “Students are our focus and we are known by their success”

Appendix A - Vision, Mission, Core Values and Motto

B) The Program/department evaluates and revises its mission statement on a regular basis.

- The Landscape Horticulture Program at Merced is designed to meet the need for trained personnel in a broad range of occupational opportunities involved with or related to the Landscape Industry. Programs can be arranged several ways as follows:
 - ❖ As a Homeowner enrichment program whereby the homeowner gains knowledge in an effort to improve their home landscape.
 - ❖ Certificate of Completion Program - a program in which all course work is directly related to gaining employment.

- ❖ Associate Degree Program - advanced technical skills are developed along with general education.
 - ❖ Transfer Program - formal education is continued at an advanced level in a four-year college or university.
- The Horticulture Program has one full time instructor and no adjunct. Monthly meeting with the Agriculture Department including Ag Business, Crop Science, Mech Ag and Animal Science, provide the opportunity to collaborate and ensure that our programs are in sync with the goals and mission of the college. Each program has Student Learning Outcomes for the program as well as each class which will be discussed later.
 - Merced College had to reinvent itself after being put on warning with our accreditation in 2012. When I started teaching full time the program review processes was out of date, Title 5 updates had not been done and assessments of classes were not complete.
 - I have an active AS, AA and Certificate.

Merced's
CurricUNET

Merced College

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[IGETC Breadth Requirements](#)

[Narratives](#)

[PCAH 5th Edition](#)

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[TMC Templates](#)

[UC-TCA Guidelines](#)

Program Search Results		
Actions	Program	Status
Landscape Horticulture (AA) A.A. Degree Jamie Wise	Active
Landscape Horticulture (AS) A.S. Degree Jamie Wise	Active
Landscape Horticulture (CT) Certificate of Achievement Jamie Wise	Active
Landscape Horticulture (AS) A.S. Degree Julie Clark	Pending
Landscape Horticulture (AA) A.A. Degree Bryan Tassey	Pending

Legend

Program Report

Edit

Copy

Help

There is currently no help available for this page.

More

- I am in the process of discontinuing the AA degree as it doesn't prepare students to transfer and is a redundant associate's degree. Currently the AS-T degree is going through curriculum.

- My program reviews are up to date as they help to provide a method of evaluating and reflecting on our programs accomplishments and future plans.

- This is proof of my comprehensive due every 4 years.

Merced's CurricUNET Merced College

Program and Services Review

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[CurricUNET Home](#)
[Track](#)
[rack](#)
[My Proposals](#)
[My Approvals](#)
[All Proposals](#)
[Completed Proposals](#)

Landscape Horticulture	
Launch	2013-12-31 11:18:37.0
Process Version	Instructional
Visual	Visual
Originator	1 (required)
Bryan Tassey	Done
Action: Launch	12/31/2013
This is my first comprehensive review, all comments and suggestions are welcomed.	
CAT	2 (required)
Aaron Gregory	Done
Action: Approve	01/14/2014
Meets criteria.	
Area Dean	3 (required)
James Andersen	Done
Action: Supported	09/23/2014
Comprehensice Program Review Needed	

Help
 There is currently no help available for this page. [More](#)

Legend
 Word Report
 Course Impact Report
 Course/Program Comparison Report
 Edit

- This is proof of my annual review. This also provides documentation for our Perkins application for funding our programs.

Appendix B – Annual Review

Program and Services Review

Welcome, Bryan

[Log Out](#)

[CurricUNET Home](#)

[Track](#)

Track

- [My Proposals](#)
- [My Approvals](#)
- [All Proposals](#)
- [Completed Proposals](#)

Landscape Horticulture	
Launch	2013-11-01 22:29:35.0
Process Version	Instructional
Visual	Visual
<hr/>	
Originator	1 (required)
Bryan Tassey	Done
Action: Launch	12/13/2013
I had this done long ago but did not know I had to "Launch" after I "submit". Lord help me if I have to "finalize", "complete" or "mail". I just want to be "done".	
<hr/>	
CAT	2 (required)
Aaron Gregory	Done
Action: Approve	01/14/2014
Meets criteria.	
<hr/>	
Area Dean	3 (required)
James Andersen	Done
Action: Supported	09/23/2014
Comprehensive Program Review Needed	
<hr/>	
IMPC Co-Chairs	4 (required)
IMPC Co-Chairs	Awaiting Approval

Help

There is currently no help available for this page.

[More](#)

Legend

- Word Report
- Course Impact Report
- Course/Program Comparison Report
- Edit

Governet

- Currently all classes are being assessed as they come up in the assessment cycle.

Programs			
<i>You have no Approvals.</i>			
Assessments
LAND 10A Plant Identification and Usage: Fall *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 10B Plant Identification & Useage: Spring *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 11 Elements of Landscape Horticulture *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 12 Landscape Design *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 14 Landscape Construction & Installation *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 15 Landscape Maintenance *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 16 Plant Propagation *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 17 Nursery & Garden Center Practice *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
LAND 50 Residential Gardening *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action
PLSC 10 Elements of Plant Science *Assessment in Progress*		
	Assessment Module		
	Plan		
	Bryan Tassey		
	Step: Originator Changes	Level: 2.50	Action

- It has been a long hard road with this process at the college. The web based program “Curricunet” has been horrible to work with. I had 80% of my comprehensive review done three times and it was “lost” all three times. It was as if I never even started the process. Very frustrating. My Title 5 updates went much more smooth using the same system. SLO’s were severely out of date and needed to be rewritten. To access my classes the SLO’s had to be current and are now in the formal process to asses.

Appendix C – Course Outlines

Section 2: Quality Program Criteria – PROGRAM INTEGRITY

- A) The Program/Department maintains current, relevant instruction in Agriculture/Natural Resources as evident by up-to-date course outlines that have been approved by the local Curriculum process and board of trustees.
- B) The Program has integrated statewide course curriculum for applicable courses taught at the institution. These courses have been adopted by the local curriculum process and board of trustees.
 - As a single person department I am responsible for all curriculum and program requirements. In a review of Title 5 requirements and through our Comprehensive Review (every four years) a thorough check of each course outline and program requirements are reevaluated. I teach ten different classes; all have labs except for one.
 - Our process is through Curricunet, which serves as a database that pulls info into our assessment tools and updates. When it is set up properly it works pretty well, however we have had some major problems with the system and unfortunately there is not a dedicated administrator for this process. A faculty member is given release time to manage the system. Once you have completed the review, assessment or update, the system is supposed to send your information to the next party to approve. It tends to get “stuck” if someone doesn’t approve or disapprove within an allotted time and no reminders are sent. If the initiating faculty member doesn’t check on the “status” and send an email or call the person it never seems to reach the finish line.
 - Below are my ten course outlines that have been approved through our local process and are currently active. See below.
 - The Program utilizes full-time and adjunct faculty that meet all minimum qualifications as outlined by state and local equivalency standards. Currently I am the only full-time instructor and have plans to hire an adjunct instructor that is a Landscape Architect to expand our Landscape Maintenance, Construction and Design classes.

Appendix C – Course Outlines

Section 3: Quality Program Criteria – PROGRAM EFFECTIVENESS

- A) The program conducts on-going evaluation in an effort to offer an effective Agriculture/Natural Resource program.
- B) The program has an annual process through which program effectiveness can be measured.
- C) The program evaluates student outcomes and makes adjustments to curriculum and programs in an effort to improve those outcomes.
 - As previously discussed there is a comprehensive program review that happens every four years, a CTE review every two years and an Annual review every year. All of them have been documented via curriculumet and made available for our Accreditation review. Screen shots have been provided in previous sections to serve as proof of completion and that they are up to date.

See Appendix B – Annual Review

Section 4: Quality Program Criteria – EDUCATIONAL PROGRAMS

- A) The program offers current information about certificate and degrees in Agriculture/Natural Resources.
 - Currently I offer a Certificate of Landscape Horticulture, an Associate of Science Degree and an Associate of Arts Degree, both in Landscape Horticulture. Currently my program is going through CID numbering and in the process of offering an AS-T degree. I am currently working with the local curriculum committee to delete the AA degree as is no longer valid and redundant. It should have never been offered in the first place. As the program grows, my Dean and I are working on offering more specific certificates in Landscape Maintenance and Nursery Production. This will be created along with additional classes in irrigation and advanced design.
- B) The Program offers certificates and degrees in a manner that provides students the opportunity to complete the program announced within a reasonable amount of time.
 - Course offerings are set up on a spreadsheet below. Most classes are offered every two years with the exception of LAND 11 as it is the intro class that has a higher demand since it counts in most Agriculture majors and also counts in Area E for graduation in the general breadth requirements. The only class not listed that I teach is PLSC-10 that is offered every semester and also every two years is offered at night. If students are full time (12 units or more) and make a plan, they are able to complete a degree and/or a certificate in two years. Currently I am

working with my Dean to create block scheduling with cohort enrollment. This allows for students to start and finish their education in a group and take classes systematically. This has been proven to increase student success with our welding and electronic programs.

LANDSCAPE HORTICULTURE

Instructors:	<i>Bryan Tassey</i>
	386-6778
	bryan.tassey@mccd.edu

Course Number	Course Name	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019
LAND 10A	Plant Identification and Useage Fall	X				X				X			
LAND 10B	Plant Identification and Useage Spring		X				X				X		
LAND 11	Elements of Landscape Horticulture	X		X		X		X		X		X	
LAND 12	Landscape Design			X				X				X	
LAND 14	Landscape Construction & Installation				X				X				X
LAND 15	Landscape Maintenance	X				X				X			
LAND 17	Nursery/Garden Center Practice		X				X				X		
LAND-16	Plant Propagation			X				X				X	
LAND-50	Residential Gardening				X				X				X

- C) The Program identifies and makes public student learning outcomes for its certificate and degree programs.

- All information is accessible through our online catalog. Here are screen shots of the info.

DEGREE (12/06)

A.A. - Landscape Horticulture (01350.AA)

The Associate in Arts Degree is earned upon satisfactory completion of the 19-unit core in addition to the graduation requirements.

Program Student Learning Outcomes

- Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
- Demonstrate the ability to perform the hands on skills and abilities to build/construct various projects related to the landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
- Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
- Faced with either a hypothetical or actual problem dealing with planting or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Core:		Units
LAND-10A	Plant Identification and Usage: Fall.....	3
or		
LAND-10B	Plant Identification and Usage: Spring.....	3
LAND-11	Elements of Landscape Horticulture	3
LAND-12	Landscape Design	3
LAND-14	Landscape Construction and Installation	3
MECH-31	Equipment Safety	1
PLSC-10	Elements of Plant Science	3
SOIL-10	Soil Science	3
		19

DEGREE (12/06)**A.S. - Landscape Horticulture (01350.AS)**

The Associate in Science degree is earned upon satisfactory completion of the 19-unit core and electives for a total of 30 units in addition to the graduation requirements.

Program Student Learning Outcomes

- A. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
- B. Demonstrate the ability to perform the hands on skills and abilities to build/construct various projects related to the landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
- C. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
- D. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Core:	Units
LAND-10A Plant Identification and Usage: Fall.....	3
or	
LAND-10B Plant Identification and Usage: Spring	3
LAND-11 Elements of Landscape Horticulture	3
LAND-12 Landscape Design	3
LAND-14 Landscape Construction and Installation	3
MECH-31 Equipment Safety	1
PLSC-10 Elements of Plant Science	3
SOIL-10 Soil Science	3
Plus 11 units from the following electives:	
AGBS-18 Agricultural Computer Applications	3
DRFT-04A Fundamentals of Computer-Aided Drafting.....	3
FPRO-13 Fruit Tree Maintenance	3
LAND-15 Landscape Maintenance	3
LAND-17 Nursery and Garden Center Practice.....	3
MECH-15 Small Engine Repair/Maintenance.....	3
or	
MECH-35 Compact Power Equipment	3
PLSC-13 Economic Entomology	3
LAND-16 Plant Propagation.....	3
SOIL-11 Fertilizers and Soil Amendments.....	3
	30

CERTIFICATE**Landscape Horticulture (01350.CT)**

A Certificate of Achievement will be awarded upon the satisfactory completion of the 19 unit core and 18 units from the electives below.

Program Student Learning Outcomes

- A. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
- B. Demonstrate the ability to perform the hands on skills and abilities to build/construct various projects related to the landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
- C. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
- D. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Core:	Units
LAND-10A Plant Identification and Usage: Fall.....	3
or	
LAND-10B Plant Identification and Usage: Spring	3
LAND-11 Elements of Landscape Horticulture	3
LAND-12 Landscape Design	3
LAND-14 Landscape Construction and Installation	3
MECH-31 Equipment Safety	1
PLSC-10 Elements of Plant Science	3
SOIL-10 Soil Science	3
Plus 18 units from the following electives:	
AGBS-18 Agricultural Computer Applications	3
DRFT-04A Fundamentals of Computer-Aided Drafting.....	3
FPRO-13 Fruit Tree Maintenance	3
LAND-15 Landscape Maintenance	3
LAND-17 Nursery and Garden Center Practice.....	3
MECH-15 Small Engine Repair/Maintenance.....	3
or	
MECH-35 Compact Power Equipment	3
PLSC-13 Economic Entomology	3
LAND-16 Plant Propagation.....	3
SOIL-11 Fertilizers and Soil Amendments.....	3
	37

D) The Program documents the technical and professional competence of students completing certificate and degree programs.

- I use an online gradebook where student's assignments/grades are documented. If students meet the minimum requirement(s) then they will be evaluated by our graduation evaluator and then names will be forwarded to our division secretary for the Dean and the Faculty member to review.

E) All Certificates and degrees offered in the program have been approved through the local curriculum process and adopted by the local board of trustees.

- All of my degrees and the single certificate have met the above criteria. Evidence of this is by the date approved and the number in parentheses from the above screen shots. An example is below.

DEGREE (12/06)
A.S. - Landscape Horticulture (01350.AS)

F) The program utilizes publications and other media to inform the community of program of activities.

- I have spent four hours with our social media professor on campus developing a plan. I have a twitter, Instagram and Facebook account for the Merced College Agriculture Department. Below is evidence of our register sites with the college. Not that I am competitive, but you might notice that we have the most out of anyone on campus!! Primarily our Facebook account is used. Below is our insights.

The Merced College Social Media Sites:

Registered Department/Program Pages:

Athletics - Merced College Hall of Fame
Administrative Office Management Program
Agriculture Division
Blue Devil Report
CEO Club
Community Services
Dance Teachers Cooperative
Drafting
HSI-Grant-STEM
Library - Merced Campus
Library - Los Banos Campus
MCPod Podcast
Merced College Foundation
Print Services, Merced College
Puente Program
Social Media Certificate Program
Student Help Desk, Merced College
Student Success Program, Merced College

G) The program continues to improve and expand course offerings to reflect the ever-changing agriculture industry.

- Currently I am working with my Dean to create block scheduling with cohort enrollment. This allows for students to start and finish their education in a group and take classes systematically. This has been proven to increase student success with our welding and electronic programs. In addition to this I am working on the development of a Botanical Garden on campus. After the development of this wonderful space, there will be an endless amount of ideas and opportunities for classes. From noncredit to credit classes and also Industry seminars and community events!

Section 5: Quality Program Criteria – PROGRAM STUDENT SUPPORT AND DEVELOPMENT

C) The Agriculture/Natural Resources program has identified and conducts student leadership activities outside of normal classroom instruction.

- I have taken students to the PLANET Student Career Days competition for three years. Student Career Days is an annual three-day event among students enrolled in Horticulture Programs from colleges and universities across the country. The students have the chance to compete in events that are directly related to the skills necessary for a career in the green industry. The event also offers a career fair which gives the students the opportunity to meet prospective employees in the industry and discuss employment opportunities.

- In addition, many field tips have been set up from Berkeley Botanical Garden to SG Succulents in Watsonville.

D) Agriculture/Natural Resources student leadership organizations have been sanctioned by the appropriate college student body organization.

- All of items in section 5A have been approved by a trip request that my Dean and VPI sign.

E) Agriculture/Natural Resources student leadership organizations have constitutions, advisors, and elected offices.

- I do not currently offer this kind of opportunity. Students can sign up for our Agriculture Ambassadors class that is run by Kim Donaher.

F) The program provides funding for student leadership organizations and student expenses.

- Every year we hold an even called “Aggie Fest” which is a beer and sausage tasting event. Approximately \$20,000-24,000 is made that directly supports our Agriculture students with leadership activities.

G) The Program has an Agriculture Ambassador program.

- Mrs. Donaher teaches the Agriculture Ambassador program and some of my student participate. I am the “official photographer”.

H) The Program regularly has students take part in CAL statewide leadership activities.

- Mrs. Donaher takes students to compete annually.
- I) The Program has an alumni, boosters, or backers group that supports the educational program.
- I serve as a Board member of the Tree Partners Foundation. This foundation is a 501c3 and fully support my program politically and financially. In many cases this foundation has worked tirelessly in support of MC Horticulture.

Section 6: Quality Program Criteria – INFORMATION AND LEARNING RESOURCES

- A) The college provides the Agriculture/Natural Resources program with a computer laboratory facility for students to have access outside of normal classroom activities.
- We have a brand new library with computer stations for students to have access anytime it is open. There is also “Study Central” that has a limited number of computers available. In the Mech Ag Shop there is a dedicated computer lab that students can have access to with an instructor’s permission.

- B) The College provides the Agriculture/Natural Resources program with adequate technology that reflects the Agriculture Industry.
- The short answer is yes. While there is always room for improvement with technology, MC Horticulture is proud to share that we have a central control irrigation system on campus that serves as the brain for our nursery irrigation system. We currently run 54 stations, with a rain sensor and plans to install a flow sensor by the end of 2014. The entire system can be programed off of ET (Evapotranspiration) and can be accessed remotely.

Section 7: Quality Program Criteria – FACULTY AND STAFF

August 2014

Seated L-R: Steve Bell, Fong Xiong, Chad Russell, Karen Wallace, Kim Donaher, Scott Brown, Richard Orozco, Bill Walls, Bryan Tassey, Darol Fishman

Standing L-R: Andrew Ornelas, Paul Dunn, Chris Minor, James Thornburgh, Jason Handforth, Michael Weepers, Jeff Nagano, Aaron Gregory, Aaron Hamilton, Jaime Farao, Ramon Avila Jr.

- A) The Program utilizes only qualified full-time and adjunct meeting the minimum local and statewide qualifications.
- The minimum qualification is a Bachelor of Science in a related field. I am a single person department and meet the minimum qualification.
- B) The institution has sufficient faculty and staff that are qualified by appropriate education and experience to support the Agriculture/Natural Resources program.
- As the Botanical Garden develops the program will grow and will demand more faculty. An adjunct position is just on the horizon.
- C) The local faculty is compensated for extended time needed to maintain instructional programs.
- Unfortunately, I run a volunteer operation. I do not get compensated to check water on the weekends or over summer or winter breaks.

D) Instructors are given release time or compensated for the development and coordination of industry internships for students.

- This unfortunately does not happen. All job placements and industry coordination I do for free. I am not compensated for anything outside my normal contract with the exception of the FFA field day. We receive a small stipend based on the contest.

E) All full time instructors in the Agriculture/Natural Resources program regularly participate in professional development activities provided by VTEA Statewide AGNR Leadership funds.

- In the beginning of my career I participated in Mid-Winter, but found I didn't receive a strong enough return on investment of my time. I seek out professional development on my own and visit nurseries and business owners regularly. I find this the best use of my time and have tangible evidence of this success when I bring home new curriculum or something simple like plants!

F) All instructors keep themselves current on Agriculture/Natural Resources program regularly keep themselves current on degree and articulation requirements so they can advise students properly.

- We have a coordinator that helps facilitate articulation agreements with high schools. My program is current and six agreements and working on three additional. I have simplified the process for the instructors and the high school students.

Appendix D – Articulation

G) All instructors keep current on agriculture/natural resources issues by working with their local industry advisory committees.

- We meet once per year on campus as a combined Agriculture Advisory group. I also meet quarterly with the Tree Partners Foundation which serves as the best resource for my program. I also serve on the “California Dialog Exchange” which is composed of Industry leaders and a few from the world of academia. I currently serve on six High School Advisory Committees.

Appendix E – Advisory Minutes

October 2014 Advisory Meeting

H) All faculty are routinely evaluated through college guidelines and go through a process of self-evaluation.

- As a “faculty lead” I am in charge of the process for my Cohort which is comprised of Agriculture and Industrial Technology faculty members.

Appendix F – Faculty Evaluations

Section 8: Quality Program Criteria – Physical Resources

- A) The institution has ensured that the Agriculture/Natural Resources program has adequate physical resources to support its educational services wherever and how ever they are offered.
- The horticulture facility is growing in pace with the program. I have made every effort over the years to have a partnership with grounds but so far it has been disappointing to say the least. I do not have the greenhouse square footage to give real world experiences for my students. I have taken the bull by the horns to get another greenhouse donated and have developed partnerships with industry to help with plant material. When I started four years ago all I had was two run down greenhouses with no upgrades, aluminum lath house and soil bins. I had two hose bibs without hoses attached. We can now boast about our veggie garden with 29 beds all with their own valve to insure efficient and specialized irrigation.

- B) The management, maintenance, and operation of the physical facilities ensure effective utilization and quality necessary to support the Agriculture/Natural Resources program.
- The maintenance has been horrible except in the past year. The Director basically said no to everything but with the help of my Dean and Vice President of Business Administration I have been able to get a lot accomplished. All of my safety concerns have been addressed. New lights have been installed at the nursery that is water proof and all electrical has been gone over
- C) Physical resource planning and evaluation supports program outcomes and are linked to the planning and evaluation efforts of the program and the institution.
- Through our program review process we are asked to link our Program goals to Program Student Learning Outcomes (SLOs), Institutional SLOs, and Strategic Planning goals. All of this is documented through Curricunet. This process happens annually and is also tied directly into our Perkins application for funding and also serves as justification for resource allocation.

Appendix G – Comprehensive Program Review

- D) The institution provides hands-on agriculture laboratory that provides for student outcomes necessary for the agriculture industry.
- The Merced College Landscape Unit includes greenhouses, a lath house, a spacious growing grounds and modern head house for potting. Facilities available to the Landscape Unit include a large school farm, laboratories, classrooms, and a landscaped campus. These facilities provide excellent opportunity for study and practice in the production and use of ornamental plants both for sale and for use in the landscape.

Section 9: Quality Program Criteria – FINANCIAL RESOURCES

A) The program faculty participates in the local governance process at the college.

- Currently I serve on the Academic Senate as a voting Senator, serve as the elected “Faculty Lead” for AG and IT. Listed below are committees that I currently serve on or have served on in the past.
 - Reorganization Task Force
 - Safety Committee
 - Facility Master Planning Task Force
 - Instructional Council
 - Instructional Master Planning Committee
 - Graduation Committee
 - MCFA – Faculty Union Rep
 - Scholarship Committee

B) The program work within the governance structure of the college to secure funding sources for the Agriculture/Natural Resources program.

- With evidence of the above list I have served my heart out to secure funds for Agriculture Programs. The college has a fair process for Perkins (CTE) funding and also Resource Allocation (district dollars). I have been part of all processes from the start of my first year on campus.

Appendix H – Perkins Application

C) The institution provides sufficient human and financial resources to offer the programs, degrees and certificates.

- The District has been very good from my point of view, from a HR, and Financial Services point of view. We have had trouble in the past of

securing a long term Director of HR but have managed to backfill that position in a timely manner. I have met with our accountants to develop of point of sale system and am proud to say that I am the only one on campus that can use Square Card reader.

- The MC Foundation has a wonderful scholarship program where I am one of six faculty members that serve on the committee. I also serve on the CANGC statewide scholarship committee. Students that work hard and apply for scholarships and financial aid do not have any trouble getting their education funded.

D) The Program works with the local agriculture advisory committee to seek financial support from the agriculture industry for the program.

- As stated above I meet annually with our large Advisory Committee. Quarterly, I meet with the Tree Partners Foundation. The Foundation has donated \$15,000 in supplies and equipment. I have developed partnerships with L.E. Cooke and Orange County Nursery who have donated a combined \$19,000 of bareroot stock over the past six years. SG Succulents donated \$6,000 worth of mother stock. Takao Nursery in Fresno allows my program to buy unrooted cuttings for my plant sales which is extremely helpful since I can go and pick them up and not have to pay for overnight shipping.

- E) The program works with institutional administration to secure VTEA funding for the program.
- I am very fortunate that my Dean is not only a former Agriculture teacher but also the CTE Dean. He is in charge of all VTEA funding and understands our needs and has made the process fair. As the Faculty Lead I meet with the Dean to discuss procedures and methods to help faculty have the best chance at securing funds for their program. There is an application that is tied to our program reviews that must be current to be considered for funding. I work with faculty to disseminate information

and provide training for these processes. I am very involved in our shared governance of the college and have monthly meetings with the Vice President of Instruction who also approves of VTEA funding.

F) The Program operates the agriculture laboratory following industry standards in the production of agriculture commodities.

- The nursery serves as the heart of the Horticulture program at Merced. I have doubled the amount of lab working area for students to apply what they have learned in lecture. My irrigation system is as high tech and efficient as it gets. We currently run Rainbird IQ Central Control with a rain sensor. I have advanced programming software which allows me to control stations more efficiently. This winter I will install a flow sensor that not only logs flow but will have the ability to shut water off if the flow exceeds acceptable standards. For example if I know station one runs for 10 minutes and puts out 100 gallons but today it put out 300 the system will shut station one off and flag it for me to investigate a possible break in the line.
- I am constantly buying new plants to stay on top of current trends and am focused on building out the nursery with facilities that students can be trained and transition easily into the industry. I have seen many programs that have multimillion dollar facilities and are not realistic to train individuals to be entrepreneurs.

Section 10: Quality Program Criteria – GOVERNANCE AND ADMINISTRATION

A) The program faculty participates in the local governance process at the college.

- Currently I serve on the Academic Senate as a voting Senator, serve as the elected “Faculty Lead” for AG and IT. Listed below are committees that I currently serve on or have served on in the past.
 - Reorganization Task Force
 - Safety Committee
 - Facility Master Planning Task Force
 - Instructional Council
 - Instructional Master Planning Committee
 - Graduation Committee
 - MCFA – Faculty Union Rep
 - Scholarship Committee

B) The Program faculty meets on a regular basis to conduct departmental operations.

- This is a challenge! My first year we had regular monthly meetings as our teaching schedules did not overlap. My second year we had a new VPI that changed how scheduling of times for our classes occurred. It makes

more sense as it is designed around utilizing our facilities more efficiently but this did have one drawback. It was impossible for us to meet all together without cutting a class short. We are working on scheduling classes around a one hour block of time for meetings. We do meet monthly at the very least, with some events needing weekly meetings like Aggie Fest (our annual fundraiser) and our FFA Field Day.

C) The program leadership and faculty work with institutional administration and Board of Trustees to effectively build the program.

- I have met with the College President, Vice President of Business Administration and Vice President of Instruction many times for various reasons. I have actively participated at four Board of Trustees meetings and soon to be five. I have a strong relationships with the Dean of my Area and also with the Deans of English, Math/Science and Art/Humanities. Many administrators have come and participated at my plants sales and have supported my program in many ways.

D) A staff member serves as program leader and receives time to fulfil these duties.

- Currently I do not receive any additional compensation to be a program manager both monetarily or in release time.

Section 11: Quality Program Criteria – ACADEMIC COLLABORATION

A) The program faculty and staff meet with local 9-12 agriculture education managers and instructors to develop integration and articulations agreements recognizing the course content taught at the local high school level.

- I serve on six advisory committees and meet with High School teachers regularly. In my first year I visited every high school that had an existing Horticulture program and brought donated supplies. Each high school was given materials such as flats, containers, rooting hormone, potting mix, and tons of plants. Each school received a half of a gooseneck livestock trailer filled to the top.
- I have worked with all schools to get articulation agreements up to date and took it a step further to provide them with lessons that meet my criteria. The process has been ultra-simplified down to allowing the teachers to administer the testing at their school. All that is required is a signed sheet, with a check for \$50 and I walk the info up to student fees for processing. The student literally doesn't even have to step foot on campus to receive credit. Currently seven schools have taken advantage of this opportunity for their students.

- I have made many visits to high schools that have now started a brand new horticulture program. El Capitan, Hilmar, Mariposa and Buhach Colony all have had multiple visits to help with curriculum and facility development. Teachers have visited my facilities to take pictures and develop ideas for their program. I have traveled as far as Liberty Ranch in Galt to support Horticulture programs in my Region.

Vikki Davis
Golden Valley FFA

Merced
FFA

Atwater High
MC equipment and
student trenching

Dave Gossman
Getting some training
from MC Horticulture

B) Faculty regularly attend local 9-12 program activities and assist in the development and delivery of leadership training events such as parliamentary procedure, public speaking, etc.

- Merced College hosts, on a rotational basis, sectional and regional contests. I judge creed at the sectional level and usually extemporaneous speaking at the Regional. I actively participate in the critique following each contest. I am also very active as a judge for Sectional Project Competition. Merced College sponsors the event and coordinates a faculty member and industry leader to visit each student on site. This takes a full week of 10-12 hour days to complete. MC facilitates the awards dinner at the Fairgrounds which attended by 400 people plus. I have helped coach CDE teams in Horticulture for four years.

Project comp banquet

C) Faculty regularly attends meetings and participates in local advisory committee activities at the 9-12 agriculture education programs in their service area.

- I currently serve on and actively participate in six different high agriculture advisory committees. The only time that I don't attend is if there is a schedule conflict with a class that I am teaching or a conflict with other advisory meetings. I attend CATA meetings as much as humanly possible and will participate in the San Joaquin region Roadshow this fall.

D) Program managers and staff communicate regularly with UC/CSU to assist in course articulation and student transfer processes.

- This has been a challenge but I am actively working on this. I have articulation agreements with CSU Fresno and Cal Poly SLO for courses in my program. Currently I have students at CSU Stanislaus, CSU Fresno, and UC Davis all majoring in a related field. I am actively participating in CID in the process of finalizing an AS-T degree to expedite students transferring. I serve on the Urban Forest Council and there is usually a Professor from CSU Fresno that participates. I am serving on a discussion group where the Department Head of Plant Science will also be attending so I hope to develop a relationship there.

Section 12: Quality Program Criteria – COLLABORATION WITH INDUSTRY

A) The Agriculture/Natural Resources programs have established advisory committees that meet at least twice a year to review curriculum, review student learning outcomes, and fulfill advisory functions of the various instructional programs.

- MC Agriculture has one meeting per year with our advisory committee. We meet as a large group and discuss macro concerns and successes and receive an oral report from our Dean. After the large meeting we break out into our disciplines to go over in depth our course outlines and specifics within our program.
- Quarterly I meet with the Tree Partners Foundation which also serves as my Advisory Committee. I give a Merced College report at each meeting and discuss the various concerns that I have. Feedback is always given and documented in minutes.

Jim Williamson, President of the Tree Partners Foundation
serving as a judge at the MC Field Day

B) Students are completing industry internships at sites relating to career goals.

- Currently Merced College does not have an internship program but is actively working on it with the Chancellor's office. We have a class called "Cooperative Education" that is 1-4 units based on the amount of hours worked. I help to facilitate students that need/want this type of class. I have placed students with wholesale and retail nurseries. With the PLANET competition students have been offered internships through their program.

MC Horticulture students competing at PLANET

C) Instructors are developing internship sites that support the industry and Agriculture/Natural Resources instructional programs.

- I am actively participating in a statewide, Industry led, "Discussion Group". Part of the goals of the group is to energize the Industry and help with academia in any way possible. One of their major topics that I will be speaking about is internships with community colleges. I will also be speaking on the need for active participation with advisory committees.

D) The program maintains a list of approved internship sites for each major within the department.

- Currently we do not have a formal internship program. The college administration is actively working on this.

Students gaining valuable sales experience at our plant sale.

- E) The program utilizes a cooperative work experience program to place students in internships or jobs to foster relationships with the agriculture community.
- I do this informally. I have sought out business owners to develop relationships such as Danny Takao, Ken and Matthew Altman, Deanna van Klaveren, Tom Burchell, Bob Ludekens, Michael Frantz, etc. I have also fostered relationships with municipalities to find opportunities for students within the public sector. Currently at Merced College I have been trying to develop a program to work with grounds so students can gain experience and attend school.

Merced Community College District
STRATEGIC PLANNING TASK FORCE (SPTF)
Draft Vision, Mission, Core Values, and Motto
April 24, 2014

Vision

Merced College will provide transformative and empowering educational experiences to meet student and community needs.

Mission

Merced College serves as a gateway to the future, providing accessible, affordable, and relevant education and workforce training for students in our richly diverse region. The college offers programs of study that lead to transfer, associate degrees, and certificates. Merced College provides basic skills and noncredit courses, as well as community education for personal and professional enrichment.

Core Values

Student Success: We focus on student access and success.

Supportive Environment: We promote an atmosphere of trust where communication and teamwork cultivate a rich environment for teaching and learning.

Proactive: We utilize agility, innovation, and responsible risk-taking to create our preferred future.

Partnership: We actively engage with the community and community partners to respond to cultural, educational, economic, and technological needs.

Diversity: We embrace diversity and equity as community strengths and celebrate these qualities in our institution.

Self-Reflection: We strive for continuous improvement based on data-driven self-reflection, objective assessment, and dialogue.

Motto

"Students are our focus and we are known by their success"

Annual 14-15 LAND

- Name of Program: Annual 14-15 LAND
- Name of person(s) preparing document: Bryan Tassey
- Dates of meeting(s) to discuss and review document:

This is a single person department.

- Names of Participants and Titles:
Bryan Tassey - Professor of Landscape Horticulture
- Degrees and Certificates:
Landscape Horticulture (AA), Landscape Horticulture (AS), Landscape Horticulture (CT)
- Year: 2014/2015
- Discipline: Landscape Horticulture (LAND)

1. Have there been any changes in this program over the last years which have had a significant impact on the program's goals and/or effectiveness? If so, please explain the changes that have occurred and how the changes have impacted the program.
Progress has been made on the Botanical Garden. An addendum to the Facility Master Plan will go before the Board of Trustees on November 18th.
The Nursery has been upgraded and expanded. New uniform benches have been installed and a new greenhouse will be complete by the end of the Fall 2014 Semester. A grant through the County Health Department was granted to my program to build Headstart veggie gardens and provide plants.
2. Please summarize the progress the program has made on Student Learning Outcomes (SLOs) assessments at the course and program level since the last review and how the findings of those assessments have been utilized to improve student learning.
All student Learning outcomes are up to date and have been approved. They are currently being assessed as the classes come up. Most of the 10 classes that I teach are on a 2 year rotation.
3. Include a plan for assessing the course and program SLOs that have not been assessed at this time.
I have volunteered to be a CAT to hopefully guide me to better understand the process. The current meetings conflict with my schedule and there was supposed to be a training but that has not happened to my knowledge.
4. Please summarize any changes in retention, success, productivity, or other relevant data that have occurred since completion of the last planning document, whether a comprehensive review or annual planning document.
All classes are going well and I have seen my data skyrocket. My Dean shared with me my completion numbers and I had 9 last year compared to zero the first year I started.
5. Provide a status update on the 5-year Planning Goals identified in the most recent comprehensive program review.
 - Is the program on target to meet the most recent 5 Year Planning Goals?
Goal Statement 1: Develop a Botanical Garden on campus - The document goes before the Board on November 18th,
Goal Statement 2: Improve the Nursery size and quality on campus. New benches have been made and are uniform across the entire nursery. Irrigation is 100% functional and a new vendor for potting mix has been found and the quality of the product is very good.
Current trials are in progress.
 - Are the program's 5 Year Planning Goals still relevant?
Yes
 - Has there been a change in the priority of the program's 5 Year Planning Goals?
No change.
6. Provide an Update on any Grants, External Reviewers, and Advisory Committees
 - Advisory Committee(s)
 - Name of Advisory Committee:
Steve Mua Tim Donovan Bill Weir Bill Crivelli Steve Obad Doug Thiel Ken Williams Jean Obad Jim Williamson Bryan Tassey Steve Bell Jim Cunningham Don Emerick Kim Donaher Katie Dumford Darol Fishman Matthew Terra Denise Skidmore Dino Migliazzo Alpha Gipe Elaine Valladao
 - Describe the most recent recommendations of the committee and how those recommendations have been implemented:
The committee fully supports my efforts and vision for the program. They recommend that the Botanical Garden move forward to the Board of Directors.
7. Program SLOs
 - a. Landscape Horticulture (AA)
 - i. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
 - ii. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
 - iii. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
 - iv. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
 - b. Landscape Horticulture (AS)
 - i. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
 - ii. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
 - iii. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
 - iv. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
 - c. Landscape Horticulture (CT)
 - i. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.

- ii. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
- iii. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
- iv. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

8. 5-Year Plans

Goal Statement 1: Develop a Botanical Garden on campus
Objectives:

Gain approval from the Board of Trustees
Create a fundraising committee

Find funding sources - Cal Fire Grant

Target Date for Completion: 06/01/2015

Person(s) Responsible for Completion: Bryan Tassey

Benchmark: November 18th Board Meeting. Fill out Cal Fire Grant Application

Describe the Means of Assessment: If the Board passes the Addendum then I will have reached part of my goal.

Program Outcomes:

1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry.
These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
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10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Strategic Planning Goals:

1. Assure student access and success.
2. Improve communication throughout the district.
3. Partner with the community.
4. Promote a Sustainable, Supportive, and Safe Learning Environment.

ISLOs:

- a. Communication
- b. Cognition
- c. Global and Community Consciousness and Responsibility
- d. Personal Development and Life-Long Learning

Goal Statement 2: Improve the Nursery size and quality on campus.
Objectives:

Install additional irrigation and growing bays for increased production.

Acquire materials (plants, soil, containers, etc) for nursery production.

Target Date for Completion: 06/01/2015

Person(s) Responsible for Completion: Bryan Tassey

Benchmark: Filling out Perkins application and finding industry contacts for support and donations.

Describe the Means of Assessment: If product is in my students hands so they can learn by doing then we have success!!

Program Outcomes:

1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry.
These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
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10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Strategic Planning Goals:

1. Assure student access and success.
2. Enhance technology and systems integration.

3. Partner with the community.
4. Promote a Sustainable, Supportive, and Safe Learning Environment.

ISLOs:

- a. Communication
- b. Global and Community Consciousness and Responsibility
- c. Personal Development and Life-Long Learning

9. Yearly Objectives

Priority	Objective	5 Year Planning Goal	Person(s) Responsible	Timeline	Resources	Program SLOs	Institutional SLOs	Strategic Planning Goals
1	Nursery Supplies for new greenhouse	Improve the Nursery size and quality on campus.	Bryan Tassey	Fill out Perkins Application in October 2014	In the Fall of 2014 a new greenhouse was installed and the materials requested are to support this facility for instructional purposes. Soil is listed and will serve a potting media. General nursery supplies, hoses, containers, pruners. Carts are listed to facilitate plant material being moved around the nursery and for customers at our plant sale. There are a few safety items that are needed from Bishop Co quote for the Landscape Maintenance class.	<ol style="list-style-type: none"> 1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 6. Demonstrate the ability to perform the hands on skills and abilities 	<ol style="list-style-type: none"> 1. Assure student access and success. 2. Partner with the community. 3. Promote a Sustainable, Supportive, and Safe Learning Environment. 	<ol style="list-style-type: none"> 1. Communication 2. Global and Community Consciousness and Responsibility 3. Personal Development and Life-Long Learning

to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.

7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
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12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate

						references, determine a solution to the problem.		
2	Equipment replacement and Digital Camera	Improve the Nursery size and quality on campus.	Bryan Tassey	Fill out Perkins October 2014	The Toro Dingo is a vital part of my program. I use the piece of equipment every day and students learn hands on with different implements. This item is now 4 years old and in need of new engine and tracks. Our mechanic has looked at the motor and called Toro direct and the best solution would be to replace the motor and keep the old one for parts. The new tracks are for replacements. The current tracks are close to being worn out and visual chips and cracks are present. The digital camera set up is for taking pictures to enhance lectures and social media. Many hours have been spent developing curriculum and one of the most challenging aspects is finding free, good quality images. The suggested macro lens will allow me to take up close pictures of insects and flower parts. This is vital not only for classroom instruction but also social media. People are engaged by photos, not	<ol style="list-style-type: none"> 1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but 	<ol style="list-style-type: none"> 1. Assure student access and success. 2. Partner with the community. 3. Promote a Sustainable, Supportive, and Safe Learning Environment. 	<ol style="list-style-type: none"> 1. Communication 2. Global and Community Consciousness and Responsibility 3. Personal Development and Life-Long Learning

					<p>text and as I develop the our social media strategies this camera will be able to take the Agriculture Department to the next level.</p>	<p>not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.</p> <p>7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>8. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>9. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p> <p>11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p> <p>12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p>		
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3	Trade Show Professional Development/ Field Trips	Develop a Botanical Garden on campus	Bryan Tassey	Fill out Perkins Application October 2014.	<p>This proposal is to attend the Far West Horticultural Trade Show in Portland Oregon. I have never attended and this would serve as not only professional development but allow me to keep up on trends and find new vendors for my program. There are also a few close by areas to visit such as the World Forestry museum and Portland Botanical Gardens which is why a rental car is being requested. This would be for a three day trip for two nights and only one day of instruction would be missed. Opportunities like this are vital to the health and growth of my program. Seeing tradeshow and gardens first hand allow me to communicate to my students what is out there in the industry rather than show them via websites. The additional \$1,000 is for field trips throughout the year for instruction.</p>	<ol style="list-style-type: none"> 1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and 	<ol style="list-style-type: none"> 1. Assure student access and success. 2. Improve communication throughout the district. 3. Partner with the community. 4. Promote a Sustainable, Supportive, and Safe Learning Environment. 	<ol style="list-style-type: none"> 1. Communication 2. Global and Community Consciousness and Responsibility 3. Personal Development and Life-Long Learning
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						<p>irrigation, concrete, site preparation, and bid and job estimation.</p> <p>7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>8. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>9. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p> <p>11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p> <p>12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.</p>		
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4	Work Study Student	Improve the Nursery size and quality on campus.	Bryan Tassey	Fill out Perkins October 2014	<p>A work study student is crucial to the success of the Horticulture program. Plants don't sleep or water themselves and must need constant care in order for students in class to have a positive learning environment. This position would employ a student for fall and spring semesters to work at the Horticulture Unit. This would be a great resume builder and the best way to gain additional skills and responsibility.</p>	<ol style="list-style-type: none"> 1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation. 6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and 	<ol style="list-style-type: none"> 1. Assure student access and success. 2. Partner with the community. 3. Promote a Sustainable, Supportive, and Safe Learning Environment. 	<ol style="list-style-type: none"> 1. Communication 2. Global and Community Consciousness and Responsibility 3. Personal Development and Life-Long Learning
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5	Acquire a Technician II	Improve the Nursery size and quality on campus.	Bryan Tassey and Dean Jim Andersen	I have filled out the form for resource allocation but was unclear if this was the correct method. Dean Andersen is taking my request forward	Requesting a Technician II to help facilitate the instruction at the MC Nursery. This is also helpful for collaborating with the Science department as we grow plants for them and help with	1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation. 2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer	1. Assure student access and success. 2. Improve communication throughout the district. 3. Partner with the community. 4. Promote a Sustainable, Supportive, and Safe Learning Environment.	1. Communication 2. Global and Community Consciousness and Responsibility 3. Personal Development and Life-Long Learning

					and will advocate for this position.	specimens for BIO labs.	<p>presentation.</p> <p>3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.</p> <p>4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.</p> <p>5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.</p> <p>6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.</p> <p>7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.</p> <p>8. Identify and select the most</p>		
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6	A CTE Guidance Counselor	Improve the Nursery size and quality on campus.	Bryan Tassey and Dean Andersen	Fall of 2014	We need to have a dedicated CTE counselor to help guide students through our programs. Most are single person departments and have very specific requirements. Students need a go-to person in the Leshar building for all of their counseling needs.	<p>1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.</p> <p>2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.</p> <p>3. Given an area to be landscaped and customer parameters, plan a workable</p>	<p>1. Assure student access and success.</p> <p>2. Improve communication throughout the district.</p> <p>3. Promote a Sustainable, Supportive, and Safe Learning Environment.</p>	<p>1. Communication</p> <p>2. Computation</p> <p>3. Cognition</p> <p>4. Global and Community Consciousness and Responsibility</p> <p>5. Personal Development and Life-Long Learning</p>

landscape design including the bid and customer presentation.

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10. Evaluation

- 1: Was the time frame for completion of the Program Review adequate? Yes
- 2: Was the Review Module Clear and understandable? Yes
- 3: Was it wasy to use? Yes
- 4: Were the questions relevant? Yes
- 5: Did you find the Program Review process to have value? Yes
- 6: Was the data you reviewed completed and presented in a clear format? Yes
- 7: Please identify data source(s) used to provide data for this review Perkins Application and Comprehensive Review
- 8: Would you like additional data?
Yes There should be direct links to program data.
- 9: Please offer any comment that could improve and/or streamline Program Review.

11. Appendices

- a. [Camera](#)
- b. [Soil](#)
- c. [Nursery Supplies](#)
- d. [Far West Show](#)
- e. [Nursery Supplies 2](#)
- f. [Track and Engine](#)
- g. [Advisory Minutes](#)

12. Other: If there is anything else you would like to be considered in the annual planning document, please describe it here.

I need to work on my assessments and that is my top goal right now. I am also working on getting a technician as I lost mine before I even started the first semester and have not had a replacement since.

Merced College Course Outline

1. **Course Number:** LAND 10A **and Title:** Plant Identification and Usage: Fall
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 Counseling and Non-Credit (Weekly): 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course covers the identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nursery and Garden Centers (CAN & GC) and California Landscape Contractors Association (CLCA) plant lists. Topics include botanical nomenclature, plant hardiness and growth zones, growth habits, plant structural characteristics and soil nutritional requirements. Landscape uses are stressed along with cultural practices. Plants covered are those best observed and identified in the fall of the year.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

-, *WESTERN GARDEN BOOK*, Sunset Books. (2012).
200 plant identification cards

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

- A. Evaluate ornamental plants using the binomial method of plant nomenclature.
- B. Identify live samples of ornamental plants and correctly write Genus and species of each plant.
- C. Differentiate plant structures.

Student Learning Objectives:

7. **Course Content and Scope:**

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
 - 1. The student will use Merced College Library books dealing with landscape plants for required readings.
- C. Required Writing Assignments:
 - 1. The student must research and complete identification cards for 10 selected plants each week.
- D. Learning Activities Required Outside of Class:

1. The student will visit developed landscapes at schools, parks, and private residences along with retail and wholesale nurseries.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Evaluate ornamental plants using the binomial method of plant nomenclature.	Using note cards students must be able to recognize and identify 200 plants, using and correctly spelling their binomial nomenclature.
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	Using note cards students must be able to recognize and identify 200 plants, using and correctly spelling their binomial nomenclature.
Differentiate plant structures.	Using note cards students must be able to recognize and identify 200 plants, using and correctly spelling their binomial nomenclature.

F. Lab Content and scope:

1. View plants in the landscape and evaluate potted specimens.

8. Methods of Instruction:

Student Learning Outcome	Methods
Evaluate ornamental plants using the binomial method of plant nomenclature.	Lecture Other - Weekly slide presentations Other - Weekly visitation of plant sites Field Trips
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	Lecture Other - Weekly slide presentations Other - Weekly visitation of plant sites Field Trips
Differentiate plant structures.	Lecture Other - Weekly slide presentations Other - Weekly visitation of plant sites Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Evaluate ornamental plants using the binomial method of plant nomenclature.	Other - Weekly identification quizzes which will require the proper binomial nomenclature. Other - Weekly quizzes matching plants' botanical names with their common names. Other - Plant identification midterm and final exams.
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	Other - Weekly identification quizzes which will require the proper binomial nomenclature. Other - Weekly quizzes matching plants' botanical names with their common names. Other - Plant identification midterm and final exams.

Differentiate plant structures.	Other - Weekly identification quizzes which will require the proper binomial nomenclature. Other - Weekly quizzes matching plants' botanical names with their common names. Other - Plant identification midterm and final exams.
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10. COURSE CONTENT

Topic	Learning Outcomes
i. Background of botanical nomenclature for plants best observed during the Fall: A. Categories of consecutive rank B. Cultivar names C. Hybrid names D. Budded and grafted plants names E. Lines F. Clones	Evaluate ornamental plants using the binomial method of plant nomenclature. Identify live samples of ornamental plants and correctly write Genus and species of each plant. Differentiate plant structures.
li. External structures used in the identification of plants best observed during the Fall: A. Buds B. Stem C. Bark D. Leaves E. Flowers F. Fruit	Evaluate ornamental plants using the binomial method of plant nomenclature. Identify live samples of ornamental plants and correctly write Genus and species of each plant. Differentiate plant structures.
Ili. Identification by sight memory of 200 plants coming from the California Association of Nursery and Garden Center (CAN&GC) and California Landscape Contractors Association (CLCA) plant lists which are best observed during the Fall: A. Indoor plants B. Annuals C. Perennials D. Vines E. Ground covers F. Shrubs G. Trees	Evaluate ornamental plants using the binomial method of plant nomenclature. Identify live samples of ornamental plants and correctly write Genus and species of each plant. Differentiate plant structures.
IV. Emphasizing the following items of plants best observed during the Fall: A. Origin and climatic range B. Form of growth C. Rate of growth D. Ultimate height and spread E. Leaf structure with special emphasis on texture and color F. Flower color and texture in relation to their value in landscape use G. Fruit size and color H. Exposure and soil requirements of the plants studied i. Type of pruning used in the development of plant to fit the landscape J. Landscape use of each species of plant studied K. Propagation of each plant studied L. Pests and diseases which attack the plants collected	Evaluate ornamental plants using the binomial method of plant nomenclature. Identify live samples of ornamental plants and correctly write Genus and species of each plant. Differentiate plant structures.

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 10B **and Title:** Plant Identification and Usage: Spring
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 **Counseling and Non-Credit (Weekly):** 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course covers the identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nursery and Garden Centers (CAN & GC) and California Landscape Contractors Association (CLCA) plant lists. Topics include botanical nomenclature, plant hardiness and growth zones, growth habits, plant structural characteristics and soil nutritional requirements. Landscape uses are stressed along with cultural practices. Plants covered are those best observed and identified in the spring of the year.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Editors of Sunset Magazine, *The New WESTERN GARDEN BOOK*, (10/e). Menlo Park Oxmoor House, Incorporated. (2012).

160 plant identification cards

Small hand shear

Clear self-adhesive paper

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

- A. Evaluate ornamental plants using the binomial method of plant nomenclature.
- B. Differentiate plant structures.
- C. Identify live samples of ornamental plants and correctly write Genus and species of each plant.
- D. Locate the following structures: Apex, midrib, base and petiol.

Student Learning Objectives:

7. **Course Content and Scope:**

- A. Course Content, in outline form (attach on separate sheet)

- B. Required Readings:

- 1. The student will be assigned weekly readings and assignments from the required textbooks)
- 2. The student will gain information from University of California Cooperative Extension Bulletins.
- 3. The student will use Merced College Library books dealing with landscape plants for required readings.

C. Required Writing Assignments:

1. The student must research and complete identification cards for 10 selected plants each week.

D. Learning Activities Required Outside of Class:

1. The student will visit developed landscapes at schools, parks, and private residences along with retail and wholesale nurseries.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Evaluate ornamental plants using the binomial method of plant nomenclature.	Using note cards student must be able to recognize and identify 160 plants, using and correctly spelling their binomial nomenclature.
Differentiate plant structures.	Using note cards student must be able to recognize and identify 160 plants, using and correctly spelling their binomial nomenclature.
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	Using note cards student must be able to recognize and identify 160 plants, using and correctly spelling their binomial nomenclature.
Locate the following structures: Apex, midrib, base and petiol.	Using note cards student must be able to recognize and identify 160 plants, using and correctly spelling their binomial nomenclature.

F. Lab Content and scope:

1. View plants in the landscape and evaluate potted specimens.

8. Methods of Instruction:

Student Learning Outcome	Methods
Evaluate ornamental plants using the binomial method of plant nomenclature.	Other - Lecture at each class meeting Other - Weekly slide presentations Other - Weekly visitation of plant sites Field Trips
Differentiate plant structures.	Other - Lecture at each class meeting Other - Weekly visitation of plant sites Field Trips
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	Other - Lecture at each class meeting Other - Weekly visitation of plant sites Field Trips
Locate the following structures: Apex, midrib, base and petiol.	Other - Lecture at each class meeting Other - Weekly visitation of plant sites Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Evaluate ornamental plants using the binomial method of plant nomenclature.	Other - Weekly identification quizzes which will require the proper binomial nomenclature and spelling. Other - Weekly quizzes matching plants' botanical names with their common names. Other - Plant identification midterm and final exams

Differentiate plant structures.	<p>Other - Weekly identification quizzes which will require the proper binomial nomenclature and spelling.</p> <p>Other - Weekly quizzes matching plants' botanical names with their common names.</p> <p>Other - Plant identification midterm and final exams</p>
Identify live samples of ornamental plants and correctly write Genus and species of each plant.	<p>Other - Weekly identification quizzes which will require the proper binomial nomenclature and spelling.</p> <p>Other - Weekly quizzes matching plants' botanical names with their common names.</p> <p>Other - Plant identification midterm and final exams</p>
Locate the following structures: Apex, midrib, base and petiol.	<p>Other - Weekly identification quizzes which will require the proper binomial nomenclature and spelling.</p> <p>Other - Weekly quizzes matching plants' botanical names with their common names.</p> <p>Other - Plant identification midterm and final exams</p>

10. COURSE CONTENT

Topic	Learning Outcomes
<p>I. Background of botanical nomenclature for plants best observed during the Spring:</p> <p>A. Categories of consecutive rank</p> <p>B. Cultivar names</p> <p>C. Hybrid names</p> <p>D. Budded and grafted plants names</p> <p>E. Lines</p> <p>F. Clones</p>	<p>Evaluate ornamental plants using the binomial method of plant nomenclature.</p> <p>Differentiate plant structures.</p> <p>Identify live samples of ornamental plants and correctly write Genus and species of each plant.</p> <p>Locate the following structures: Apex, midrib, base and petiol.</p>
<p>II. External structures used in the identification of plants best observed during the Spring:</p> <p>A. Buds</p> <p>B. Stem</p> <p>C. Bark</p> <p>D. Leaves</p> <p>E. Flowers</p> <p>F. Fruit</p>	<p>Evaluate ornamental plants using the binomial method of plant nomenclature.</p> <p>Differentiate plant structures.</p> <p>Identify live samples of ornamental plants and correctly write Genus and species of each plant.</p> <p>Locate the following structures: Apex, midrib, base and petiol.</p>
<p>III. Identification by sight memory of 160-200 plants coming from the California Association of Nursery and Garden Center (CAN&GC) and California Landscape Contractors Association (CLCA) plant lists which are best observed during the Spring:</p> <p>A. Indoor plants</p> <p>B. Annuals</p> <p>C. Perennials</p> <p>D. Vines</p> <p>E. Ground covers</p> <p>F. Shrubs</p> <p>G. Trees</p>	<p>Evaluate ornamental plants using the binomial method of plant nomenclature.</p> <p>Differentiate plant structures.</p> <p>Identify live samples of ornamental plants and correctly write Genus and species of each plant.</p> <p>Locate the following structures: Apex, midrib, base and petiol.</p>
<p>IV. Emphasizing the following items of plants best observed during the Spring:</p> <p>A. Origin and climatic range</p> <p>B. Form of growth</p> <p>C. Rate of growth</p> <p>D. Ultimate height and spread</p> <p>E. Leaf structure with special emphasis on texture and color</p> <p>F. Flower color and texture in relation to their value in landscape use</p> <p>G. Fruit size and color</p> <p>H. Exposure and soil requirements of the plants studied</p> <p>I. Type of pruning used in the development of plant to fit the landscape</p> <p>J. Landscape use of each species of plant studied</p> <p>K. Propagation of each plant studied</p> <p>L. Pests and diseases which attack the plants collected</p>	<p>Evaluate ornamental plants using the binomial method of plant nomenclature.</p> <p>Differentiate plant structures.</p> <p>Identify live samples of ornamental plants and correctly write Genus and species of each plant.</p> <p>Locate the following structures: Apex, midrib, base and petiol.</p>

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 11 **and Title:** Elements of Landscape Horticulture
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 **Counseling and Non-Credit (Weekly):** 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This is a course in the study of Landscape Horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries. Topics include basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and houseplants, floral design, plant identification, turfgrass installation and care, and survey of career opportunities.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Editors of Sunset Magazine, *The New Sunset Western Garden Book*, (9/e). Menlo Park Oxmoor House, Incorporated. (2012).

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Examine the nursery industry in California and potential careers.

B. Demonstrate the ability to produce plant and care for horticultural crops.

C. Categorize the identification and nomenclature of plants.

Student Learning Objectives:

Applies to all SLOs.

A. Develop a digital portfolio including their resume with pictures of previous work experiences.

B. Collect, propagate, shift and finish containerized plants.

C. Identify 10 common house plants and write out the Genus and species of each.

7. **Course Content and Scope:**

A. Course Content, in outline form (attach on separate sheet)

B. Required Readings:

1. Assignments will be given from the required text(s)
2. Assignments will be given from trade and industry publications on the reserve reading list.
3. Assignments will be given from college publications dealing with landscape opportunities.
4. University of California Cooperative Extension Service bulletins will be available in the classroom for required readings.

C. Required Writing Assignments:

1. The student will write a research paper on one facet of Landscape Horticulture (such as landscape maintenance, wholesale or retail nurseries, the floral industry.)
2. Laboratory reports must be written (journal)

D. Learning Activities Required Outside of Class:

1. The student will visit at least one retail nursery to complete an assignment.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Examine the nursery industry in California and potential careers.	The student will evaluate job opportunities and analyze experience and educational requirements for specific jobs, through watching media presentations and creating a portfolio.
Demonstrate the ability to produce plant and care for horticultural crops.	The student will compare and contrast plants under different light, temperature and soil media, through practical applications.
Categorize the identification and nomenclature of plants.	The student will apply principles learned in class to make better decisions when buying plants at a nursery that will thrive in their given growing zone, through student plant sales.

F. Lab Content and scope:

1. Identification of plant parts and structures
2. Select plants according to their horticultural classification
3. Select the proper material to apply for weed and insect control
4. Prepare and mix a soil media for seeds, plugs, transplants and trees
5. Propagate plant material from seeds, cuttings, division and grafting
6. Evaluate plant conditions and determine a causative agent
7. Plan and organize a merchandising campaign for a given plant species
8. Evaluate a given landscape situation and select plants accordingly
9. Assemble and evaluate basic floriculture arrangements

8. Methods of Instruction:

Student Learning Outcome	Methods
Examine the nursery industry in California and potential careers.	Lecture Lab Demonstration Field Trips

Demonstrate the ability to produce plant and care for horticultural crops.	Lecture Lab Demonstration Field Trips
Categorize the identification and nomenclature of plants.	Lecture Lab Demonstration Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Examine the nursery industry in California and potential careers.	Other - Term paper Other - Assigned laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers
Demonstrate the ability to produce plant and care for horticultural crops.	Other - Term paper Other - Assigned laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers
Categorize the identification and nomenclature of plants.	Other - Term paper Other - Assigned laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers

10. COURSE CONTENT

Topic	Learning Outcomes
I. The Landscape Horticulture Industry in California A. History B. Current scope C. Employment opportunities D. Future growth/employment	Examine the nursery industry in California and potential careers.
II. Environmental Issues and Regulations A. Waste B. Water C. Fertilizers D. Pesticides	Examine the nursery industry in California and potential careers. Demonstrate the ability to produce plant and care for horticultural crops.
III. Horticultural Occupations and Their Employment Requirements (ESO A, B, C, 0): A. Nursery B. Landscape C. Turf D. Floral design E. Education F. Public service	Examine the nursery industry in California and potential careers.
IV. Tools, Equipment, and Safety Practices A. Use of tools, specialized equipment. and nomenclature B. Safety in handling equipment C. Safety in handling pesticides	Demonstrate the ability to produce plant and care for horticultural crops.
V. Plant Structures and Functions A. Stems B. Leaves C. Flowers D. Fruit/Seeds E. Roots	Demonstrate the ability to produce plant and care for horticultural crops. Categorize the identification and nomenclature of plants.
VI. Soils and Container Media A. Types of soils B. Soil reactions C. Amending soils	Demonstrate the ability to produce plant and care for horticultural crops.
VII. Plant Propagation A. Seeds B. Cuttings C. Grafting and budding D. Miscellaneous methods	Demonstrate the ability to produce plant and care for horticultural crops. Categorize the identification and nomenclature of plants.
VIII. Requirements of Plant Growth A. Light B. Air C. Water D. Mineral E. Anchorage	Demonstrate the ability to produce plant and care for horticultural crops. Categorize the identification and nomenclature of plants.
IX. Irrigation and Fertilizing A. Plant needs B. Deficiency symptoms C. Methods of application/techniques D. Rates of application E. Schedules	Demonstrate the ability to produce plant and care for horticultural crops.

<p>X. Pest and Disease Damage Identification</p> <p>A. Diagnosis pests/disease</p> <p>B. Damage assessment</p> <p>C. Control measures</p>	<p>Demonstrate the ability to produce plant and care for horticultural crops.</p>
<p>XI. Horticultural Structures</p> <p>A. General layout</p> <p>B. Greenhouses</p> <p>C. Propagation units</p> <p>D. Systems - heating/cooling, irrigation/mist</p>	<p>Examine the nursery industry in California and potential careers.</p> <p>Demonstrate the ability to produce plant and care for horticultural crops.</p>
<p>XII. Landscape Horticulture Business and Marketing Methods</p> <p>A. Retail nursery and garden centers</p> <p>B. Wholesale production nursery</p> <p>C. Landscape contractor</p> <p>D. Landscape maintenance/gardening company</p> <p>E. Flower shop</p> <p>F. Interiorscape company</p> <p>G. Arboriculture company</p>	<p>Examine the nursery industry in California and potential careers.</p> <p>Demonstrate the ability to produce plant and care for horticultural crops.</p>
<p>XIII. Nursery and Greenhouse Crops - Planting and Care</p> <p>A. Planting - propagation by sexual and asexual means</p> <p>B. Transplanting larger sizes</p> <p>C. Prune and maintain container stock</p>	<p>Demonstrate the ability to produce plant and care for horticultural crops.</p>
<p>XIV. Plants in the Landscape</p> <p>A. Landscape trees</p> <p>B. Shrubs</p> <p>C. Vegetables</p> <p>D. Vines/ground covers</p> <p>E. Annuals/perennials</p>	<p>Examine the nursery industry in California and potential careers.</p> <p>Demonstrate the ability to produce plant and care for horticultural crops.</p> <p>Categorize the identification and nomenclature of plants.</p>
<p>XV. Plant Identification and Nomenclature</p> <p>A. Basic plant identification, terminology, and techniques</p> <p>B. Grouping of plants according to horticultural characteristics, i.e., size, rate of growth, environmental preferences</p> <p>C. Shrubs, trees, ground covers, vines, annuals-perennials, house plants</p>	<p>Demonstrate the ability to produce plant and care for horticultural crops.</p> <p>Categorize the identification and nomenclature of plants.</p>
<p>XVI. Common Turf and Landscape Practices</p> <p>A. Lawn planting</p> <p>B. Overseeding</p> <p>C. Maintenance and care</p>	<p>Examine the nursery industry in California and potential careers.</p> <p>Demonstrate the ability to produce plant and care for horticultural crops.</p> <p>Categorize the identification and nomenclature of plants.</p>
<p>XVII. Basic Floral Design</p> <p>A. Introduction to floristry</p> <p>B. Care and handling of cut flowers</p> <p>C. Materials and supplies used in floral industry</p> <p>D. Cut flowers - commercial services and home garden</p> <p>E. Corsage flowers and types of corsages</p> <p>F. Basic flower arranging principles and theories</p>	<p>Examine the nursery industry in California and potential careers.</p> <p>Demonstrate the ability to produce plant and care for horticultural crops.</p> <p>Categorize the identification and nomenclature of plants.</p>

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 12 **and Title:** Landscape Design
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 Counseling and Non-Credit (Weekly): 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course includes the principles of landscape design and studies in form, space, color, texture, scale, balance utility and contrast. Materials used in landscape developments, site analysis, problems of design, correct use and selection of plant material relating to ecology and function of landscape structures in the plan will be encompassed in this course. Basic irrigation design is also a component of the course.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Leroy Hannebaum, *LANDSCAPE DESIGN: A PRACTICAL APPROACH*, (5th/e). Prentice Hall. (2002).
Booth, N., Hiss, J, *Residential Landscape Architecture: Design Process for the Private Residence*, (6/e). Prentice Hall. (2012).

Drafting leads, lead holder, point sharpener, drafting eraser

Pad of 8-112" x 11" drafting paper

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

- A. Create a functional landscape plan by applying the principles and elements of design.
- B. Propose a landscape plan to a client.
- C. Select plant materials according to proper environmental considerations and design principles.

Student Learning Objectives:

Applies to all SLOs.

- A. Demonstrate the proper use of drafting tools and graphic material.
- B. Apply the design process to solve landscape situations and meet client needs.
- C. Identify and describe architectural, historical, and environmental influences on landscape design.

- D. Identify and select plant materials according to proper environmental considerations and design principles.
- E. Analyze the qualifications of landscape architects and others who design or plan landscape installations.

7. Course Content and Scope:

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
 - 1. The student will complete weekly assignments from the text and class handouts.
 - 2. Assignments will be given from industry publications on landscape design.
- C. Required Writing Assignments:
 - 1. The student will write a term paper on one facet of landscape design.
 - 2. The student will write lab reports on all travel labs.
- D. Learning Activities Required Outside of Class:
 - 1. The student will visit at least two landscape design firms.
 - 2. The student will make a cost analysis study of a landscape plan.
 - 3. The student will spend time in the library researching and writing a term paper.
- E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Create a functional landscape plan by applying the principles and elements of design.	<p>The student will synthesize lab assignments in landscape design.</p> <p>The student will make critical selections of plant material, being careful to match ecology, plant size, color, and texture, through practical applications.</p> <p>The student will apply landscape design principles learned in class to each problem, through practical applications.</p>
Propose a landscape plan to a client.	<p>The student will make critical selections of plant material, being careful to match ecology, plant size, color, and texture, through practical applications.</p> <p>The student will apply landscape design principles learned in class to each problem, through practical applications.</p>
Select plant materials according to proper environmental considerations and design principles.	<p>The student will synthesize lab assignments in landscape design.</p> <p>The student will make critical selections of plant material, being careful to match ecology, plant size, color, and texture, through practical applications.</p> <p>The student will apply landscape design principles learned in class to each problem, through practical applications.</p>

- F. Lab Content and scope:
 - 1. Identify and select components of a landscape design
 - 2. Prepare a drafting layout prior to drafting a landscape design
 - 3. Identify and select landscape design components to match a given scenario layout

4. Plan, draw, and budget a landscape design utilizing given information.
5. Prepare a working bid based on a given landscape design to include material and labor costs.

8. Methods of Instruction:

Student Learning Outcome	Methods
Create a functional landscape plan by applying the principles and elements of design.	Lecture Class Discussion Demonstration Other - tape/slide presentations Lab Field Trips
Propose a landscape plan to a client.	Class Discussion Demonstration Other - tape/slide presentations Lab
Select plant materials according to proper environmental considerations and design principles.	Lecture Class Discussion Demonstration Other - tape/slide presentations Lab Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Create a functional landscape plan by applying the principles and elements of design.	Other - Landscape design essay Other - Midterm and final exams including essay answers Other - Laboratory design exercises Other - Writing assignments Other - Final design
Propose a landscape plan to a client.	Other - Landscape design essay Other - Laboratory design exercises Other - Final design
Select plant materials according to proper environmental considerations and design principles.	Other - Landscape design essay Other - Midterm and final exams including essay answers Other - Laboratory design exercises Other - Writing assignments Other - Final design

10. COURSE CONTENT

Topic	Learning Outcomes
I. History of Landscape Design	Create a functional landscape plan by applying the principles and elements of design.
II. The Design Principles: A. Unity B. Simplicity C. Harmony D. Balance E. Repetition F. Rhythm G. Sequence H. Focalization I. Contrast J. Variety K. Scale L. Proportion	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.
III. The Design Elements: A. Form I Shape B. Mass I Density C. Size D. Color E. Value I Tone F. Texture G. Line I Direction H. Space	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.
IV. Landscape Design Process: A. Introduction to the Design Process B. Client interview 1. Determining the wants and needs of the client 2. Determining design goals and style of the landscaping 3. Determining if clients wants are feasible C. Site Plan 1. Introduction 2. Definition of terms 3. Gathering existing site data 4. How to measure the site 5. Procedures for drawing the base plan D. Conceptual Plans 1. Introduction 2. Combining the client's wants and needs, and the site plan 3. Presenting plans to clients for review E. Plant Material Uses 1. Introduction 2. Functional use of plants 3. Selecting plants for the landscape 4. Renovation of existing plantings F. Outdoor Room Concept 1. Introduction 2. Outdoor spaces 3. Outdoor rooms in the residential site	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.

V. Landscape Drafting: A. Tools I Materials B. Techniques C. Layout D. Lettering E. Symbols F. CAD	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.
VI. Designer Relationship: A. Design Presentations 1. Introduction 2. Common homeowner approaches to residential site design 3. Initial contact by potential clients 4. Meeting the potential clients at their home 5. Presenting a portfolio 6. Design fees 7. Developing a proposal for design fees B. Contractor - Architect - Designer - Client 1. Responsibility of each party 2. JDb requirements	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.
VII. Landscape Drawings: A. Topography Drawings B. Construction Drawings C. Construction and Installation Details D. Working Drawings E. Final Drawings - Rendering	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.
VIII. Landscape Considerations: A. Local Ordinances and Requirements B. Water Conservation C. Climate and Energy Conservation D. Slopes E. Design Styles	Create a functional landscape plan by applying the principles and elements of design. Propose a landscape plan to a client. Select plant materials according to proper environmental considerations and design principles.

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

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Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 14 **and Title:** Landscape Construction and Installation
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 **Counseling and Non-Credit (Weekly):** 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Interpret graphs and statistical data.

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

Covers the fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bid preparation; also covers local codes and state requirements and prepares students to pass the C-27 Landscaping Contractor's License exam.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Field, H, *Landscape Surveying*, (2/e). Delmar Cengage Learning. (2011).
Safety glasses

Notebook and pencil

Gloves

Closed toed shoes

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.

B. Install an irrigation system, fence, and a water feature.

C. Describe proper shrub and tree planting methods, including staking systems.

D. Examine landscape plans to estimate material quantities and costs.

Student Learning Objectives:

Applies to all SLOs.

- A. Demonstrate planting trees and shrubs according to industry standards.
- B. Calculate materials necessary to complete the proposed project.
- C. Identify safety hazards, MDS sheets, the requirements of an illness and injury prevention program.

7. Course Content and Scope:

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
 - 1. Assignments will be given from trade and industry publications on the reserve reading list.
 - 2. Assignments will be given from in class handouts.
- C. Required Writing Assignments:
 - 1. The student will write bid estimates on several landscape design plans.
 - 2. Written laboratory reports will be required on certain laboratory visits.
- D. Learning Activities Required Outside of Class:
 - 1. The student will visit vendors that sell landscape construction products.
 - 2. The student will design a simple construction project to scale.
- E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.	The student will demonstrate analysis, comparison, and synthesis in selecting and using the correct hand and power tools required for the project. The student will analyze procedures and incorporate the logical steps required to complete the job, through practical applications.
Install an irrigation system, fence, and a water feature.	The student will demonstrate analysis, comparison, and synthesis in selecting and using the correct hand and power tools required for the project. The student will analyze procedures and incorporate the logical steps required to complete the job, through practical applications.
Describe proper shrub and tree planting methods, including staking systems.	The student will demonstrate analysis, comparison, and synthesis in selecting and using the correct hand and power tools required for the project. The student will analyze procedures and incorporate the logical steps required to complete the job, through practical applications.
Examine landscape plans to estimate material quantities and costs.	The student must create a logical procedure for estimating a landscape construction plan bid. The student will demonstrate analysis, comparison, and synthesis in selecting and using the correct hand and power tools required for the project. The student will analyze procedures and incorporate the logical steps required to complete the job, through practical applications.

F. Lab Content and scope:

1. Industry safety standards and practices
2. Tool and equipment selection and maintenance
3. Construction material selection and application
4. Irrigation and sprinkler system installation techniques
5. Site preparation and drainage
6. Wood structure construction techniques
7. Concrete and masonry construction techniques
8. Landscape lighting and low/high voltage electrical outlets and applications
9. Sod and lawn installation techniques
10. Plant, shrub and tree planting methods
11. Job estimation and bidding projects

8. **Methods of Instruction:**

Student Learning Outcome	Methods
Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.	Lecture Class Discussion Other - Slide/tape presentations Lab Demonstration Field Trips
Install an irrigation system, fence, and a water feature.	Lecture Class Discussion Other - Slide/tape presentations Lab Demonstration Field Trips
Describe proper shrub and tree planting methods, including staking systems.	Lecture Class Discussion Other - Slide/tape presentations Lab Demonstration Field Trips
Examine landscape plans to estimate material quantities and costs.	Lecture Class Discussion Other - Slide/tape presentations Lab Demonstration Field Trips

9. **Methods of Evaluation:**

Student Learning Outcome	Assessments
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Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.	Other - Essay paper Laboratory reports Other - Lecture quizzes Other - Laboratory exercises Other - Midterm and final examinations which will include essay answers
Install an irrigation system, fence, and a water feature.	Laboratory reports Other - Lecture quizzes Other - Laboratory exercises Other - Midterm and final examinations which will include essay answers
Describe proper shrub and tree planting methods, including staking systems.	Laboratory reports Other - Lecture quizzes Other - Laboratory exercises Other - Midterm and final examinations which will include essay answers
Examine landscape plans to estimate material quantities and costs.	Other - Essay paper Laboratory reports Other - Lecture quizzes Other - Laboratory exercises Other - Midterm and final examinations which will include essay answers

10. COURSE CONTENT

Topic	Learning Outcomes
<p>I. Scope of the landscape industry in California:</p> <p>A. Related professions</p> <p>B. Employment opportunities</p>	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Install an irrigation system, fence, and a water feature.</p> <p>Describe proper shrub and tree planting methods, including staking systems.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>
<p>II. Legal requirements to operate as a C-27 Landscape Contractor:</p> <p>A. Scope of work of C-27</p> <p>B. License requirements</p> <p>1. Documented experience and education credit</p> <p>2. C-27 exam</p> <p>a. Contractors license laws and regulations</p> <p>b. C-27 specialty trade requirements</p> <p>3. Insurance bond</p>	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Install an irrigation system, fence, and a water feature.</p> <p>Describe proper shrub and tree planting methods, including staking systems.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>
<p>III. Safety:</p> <p>A. Importance of safe work habits</p> <p>B. Clothing and shoes</p> <p>C. Vehicles, machinery and power equipment</p> <p>D. Job site behavior</p> <p>E. Accident and injury procedures</p> <p>F. Safety training and record-keeping</p>	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p>
<p>IV. Scheduling and sequence of installation activities:</p> <p>A. Permits</p> <p>B. Location of overhead and underground utilities</p> <p>C. Site clearing and preparation</p> <p>D. Rough grade</p> <p>E. Irrigation and drainage</p> <p>F. Hardscape installation</p> <p>G. Soil amendments</p> <p>H. Tree and shrub planting</p> <p>I. Lawn installation</p> <p>J. Finish grade and mulches</p> <p>K. Final cleanup and inspection</p>	<p>Install an irrigation system, fence, and a water feature.</p> <p>Describe proper shrub and tree planting methods, including staking systems.</p>
<p>V. Grading/drainage:</p> <p>A. Dealing with excess water and runoff</p> <p>B. Interpreting slopes/contours on landscape plans</p> <p>C. Use of transit and other leveling tools, including laser equipment</p> <p>D. Rough and finish/final grading</p> <p>E. Drainage systems</p> <p>1. Collection of excess water</p> <p>a. Swales and surface drainage</p> <p>b. Area drains</p> <p>c. French drains</p>	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Install an irrigation system, fence, and a water feature.</p> <p>Describe proper shrub and tree planting methods, including staking systems.</p> <p>Examine landscape plans to estimate material</p>

<ul style="list-style-type: none"> d. Catch basins 2. Conveying water <ul style="list-style-type: none"> a. Rigid/flexible pipe b. Solid/perforated pipe c. Pumps 	quantities and costs.
<p>VI. Irrigation:</p> <ul style="list-style-type: none"> A. Identification of system components on plan B. Layout, flagging and marking of heads and valves C. Trenching by hand tools and power equipment D. Pipe, wire and riser installation E. Valve, head and controller installation F. System check, adjustment and backfill 	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Install an irrigation system, fence, and a water feature.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>
<p>VII. Wood construction:</p> <ul style="list-style-type: none"> A. Characteristics of wood materials <ul style="list-style-type: none"> 1. Types of lumber and wood products 2. Structural strength 3. Decay resistance for above and below ground use 4. Dimensions, grades and finishes B. Tools and associated materials <ul style="list-style-type: none"> 1. Safety in tool use <ul style="list-style-type: none"> a. Handling and operation b. Personal protective equipment 2. Hand tool selection and use 3. Power tool selection and operation <ul style="list-style-type: none"> a. Drills b. Saws 4. Types of fasteners and hardware <ul style="list-style-type: none"> a. Nails b. Screws/Bolts c. Connectors/anchors/hangers C. Application in the landscape <ul style="list-style-type: none"> 1. Fences and gates 2. Decks, railings and steps 3. Arbors, pergolas and overhead structures 4. Other landscape structures 	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>
<p>VIII. Concrete construction:</p> <ul style="list-style-type: none"> A. Materials and methods <ul style="list-style-type: none"> 1. Concrete mixes 2. Form construction 3. Steel reinforcement 4. Pouring 5. Finishing <ul style="list-style-type: none"> a. Types of finishes b. Tools B. Application in the landscape <ul style="list-style-type: none"> 1. Walks 2. Patios 3. Other paving applications 4. Footings, piers 	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>

IX. Masonry construction: A. Materials and Methods 1. Brick 2. Concrete block 3. Pavers and interlocking units 4. Stone/flagstone/rock B. Application in the landscape 1. Paving 2. Edging 3. Retaining walls	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Examine landscape plans to estimate material quantities and costs.
X. Water features: A. Pond design and construction B. Fountains, waterfalls and stream beds C. Pumps and filtration systems D. Plumbing requirements	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Install an irrigation system, fence, and a water feature. Examine landscape plans to estimate material quantities and costs.
XI. Landscape lighting: A. Power source, transformers and wiring B. Pathway lighting C. Decorative and accent lighting D. Lighting fixtures, switches and sensors	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Examine landscape plans to estimate material quantities and costs.
XII. Planting methods: A. Soil preparation and amendments B. Placing and facing plants C. Planting holes and backfill materials D. Planting and securing trees E. Shrubs, vines and perennials F. Ground covers G. Annuals	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Describe proper shrub and tree planting methods, including staking systems.
XIII. Lawn installation: A. Seed B. Sod C. Hydroseeding, sprigs, stolons	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Examine landscape plans to estimate material quantities and costs.
XIV. Job costs, estimating and bidding: A. Interpreting landscape plans and construction details B. Materials take-off C. Supplier catalogs, publications and materials D. Estimating methods 1. Time and materials 2. Per unit cost E. Bid proposals and standard contracts.	Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment. Install an irrigation system, fence, and a water feature. Describe proper shrub and tree planting methods, including staking systems. Examine landscape plans to estimate material quantities and costs.

<p>XV. Industry associations and certification:</p> <ul style="list-style-type: none"> A. California Landscape Contractors Association B. Associated Landscape Contractors of America C. Certified Landscape Technician program 	<p>Deduce what are the best methods for safety awareness, in dress/apparel, tool use, job site demeanor, and personal safety equipment.</p> <p>Install an irrigation system, fence, and a water feature.</p> <p>Describe proper shrub and tree planting methods, including staking systems.</p> <p>Examine landscape plans to estimate material quantities and costs.</p>
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Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 15 **and Title:** Landscape Maintenance
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 Counseling and Non-Credit (Weekly): 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Interpret graphs and statistical data.

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course prepares students to enhance the function and aesthetic value of public and private landscapes by applying appropriate maintenance techniques. Topics include planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Sunset Editors, *The New WESTERN GARDEN BOOK*, (9/e). Menlo Park Oxmoor House, Incorporated. (2012).

Notebook and pencil

Closed toe shoes

Work gloves

Safety glasses

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.

B. Describe integrated pest management methods for controlling selected pests and diseases.

C. Formulate an annual maintenance calendar for a selected landscape.

Student Learning Objectives:

Applies to all SLOs.

A. Recommend a maintenance schedule for a residence.

B. Identify and apply chemicals to combat pest and disease of common landscape plants.

C. Develop a company portfolio.

7. Course Content and Scope:

A. Course Content, in outline form (attach on separate sheet)

B. Required Readings:

1. The student will read assignments in the college library's reserve section pertaining to landscape maintenance.
2. For additional reading, University of California Cooperative Extension Service brochures will be provided

C. Required Writing Assignments:

1. The student will be required to complete a company portfolio describing their services.

D. Learning Activities Required Outside of Class:

1. The student will complete a bid for the landscape maintenance contract of a commercial building.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.	The student must create a logical procedure for bidding a particular landscape maintenance project. The student will demonstrate analysis, comparison, and synthesis in organizing a landscape business, through portfolio work.
Describe integrated pest management methods for controlling selected pests and diseases.	The student must create a logical procedure for bidding a particular landscape maintenance project. The student will demonstrate analysis, comparison, and synthesis in organizing a landscape business, through portfolio work.
Formulate an annual maintenance calendar for a selected landscape.	The student must create a logical procedure for bidding a particular landscape maintenance project. The student will demonstrate analysis, comparison, and synthesis in organizing a landscape business, through portfolio work.

F. Lab Content and scope:

1. Industry safety standards and practices
2. Tool and equipment selection and maintenance
3. Plant pruning/trimming requirements and methods
4. Fertilizer and soil amendment selection and application
5. Irrigation system problem diagnosis and repair/adjustment
6. Planting and plant/tree support methods
7. Lawn care and maintenance
8. Pest and disease diagnosis and control

9. Safe handling of pesticides, herbicides and other chemicals associated with landscape maintenance

8. Methods of Instruction:

Student Learning Outcome	Methods
Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.	Lecture Class Discussion Demonstration Other - Slide/tape presentations Lab
Describe integrated pest management methods for controlling selected pests and diseases.	Lecture Class Discussion Demonstration Other - Slide/tape presentations Lab
Formulate an annual maintenance calendar for a selected landscape.	Lecture Class Discussion Demonstration Other - Slide/tape presentations Lab

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.	Other - Weekly laboratory reports Quizzes Other - Midterms including essay questions Other - Final exam including essay questions Other - Business organization assignment
Describe integrated pest management methods for controlling selected pests and diseases.	Other - Weekly laboratory reports Quizzes Other - Midterms including essay questions Other - Final exam including essay questions Other - Business organization assignment
Formulate an annual maintenance calendar for a selected landscape.	Quizzes Other - Midterms including essay questions Other - Final exam including essay questions Other - Business organization assignment

10. COURSE CONTENT

Topic	Learning Outcomes
I. Landscape maintenance industry in California: A. Scope of work of the maintenance industry B. Career and employment opportunities C. Business licenses and permits D. Local ordinances 1. Weed abatement 2. Noise control 3. Waste disposal	Formulate an annual maintenance calendar for a selected landscape.
II. Safety: A. Importance of safe work habits B. Clothing and shoes C. Vehicles, power equipment and hand tools D. Job site behavior E. Accident and injury procedures F. Safety training and record-keeping	Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees. Describe integrated pest management methods for controlling selected pests and diseases. Formulate an annual maintenance calendar for a selected landscape.
III. Tool identification, care and safe use: A. Hand tool cleaning, sharpening, repair 1. Shovels, spades, hoes, trowels, weeder 2. Garden and lawn rakes 3. Pruning shears, loppers, saws 4. Wheelbarrows, carts and miscellaneous implements B. Power equipment use and routine maintenance 1. Mowers 2. Edgers 3. Leaf blowers 4. String trimmers 5. Hedge shears 6. Rototillers 7. Turf aerators 8. Vertical mowers (verticutters)	Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees. Describe integrated pest management methods for controlling selected pests and diseases. Formulate an annual maintenance calendar for a selected landscape.
IV. Principles of plant growth: A. Plant structures and their function B. Life cycles and seasonal changes C. Light, air, water, and mineral requirements	Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees. Describe integrated pest management methods for controlling selected pests and diseases.
V. Pruning: A. Objectives 1. Plant health 2. Landscape function 3. Flowers and fruit 4. Aesthetics and special forms B. Plant types and pruning needs 1. Deciduous trees and shrubs 2. Evergreen trees and shrubs 3. Conifers 4. Flowering trees 5. Fruit trees 6. Roses 7. Rhododendrons, azaleas and camellias 8. Perennials C. Pruning methods and systems	Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees. Formulate an annual maintenance calendar for a selected landscape.

<ul style="list-style-type: none"> 1. Heading back 2. Thinning 3. Pinching 4. Shearing 5. Pollarding D. Plant responses to placement and timing of pruning cuts <ul style="list-style-type: none"> 1. Identification of stem structures <ul style="list-style-type: none"> a. Terminal and lateral buds b. Vegetative and flower buds c. Bud scale scars and age of wood 2. Importance of the branch collar and branch bark ridge 3. 3-cut method of removing large diameter branches 4. Shaping and directing growth with pruning cuts 	
<ul style="list-style-type: none"> VI. Soil amendments and fertilizers: <ul style="list-style-type: none"> A. Aeration and drainage characteristics of different soil types B. Amendments <ul style="list-style-type: none"> 1. Organic 2. Inorganic C. Mulches <ul style="list-style-type: none"> 1. Organic 2. Inorganic D. Fertilizers <ul style="list-style-type: none"> 1. Selection of organic and inorganic fertilizers 2. Nutrient needs of various plant types 3. Fertilizer label 4. Calculation of amounts required 5. Spreader types and calibration E. Soil sampling and testing 	Formulate an annual maintenance calendar for a selected landscape.
<ul style="list-style-type: none"> VII. Irrigation systems: <ul style="list-style-type: none"> A. Identification of system components B. Operation, adjustments, and basic repairs <ul style="list-style-type: none"> 1. Controllers 2. Valves 3. Heads and emitters 4. PVC pipe, risers, and plastic tubing C. Plant water needs and water-efficient irrigation scheduling 	Formulate an annual maintenance calendar for a selected landscape.
<ul style="list-style-type: none"> VIII. Planting methods: <ul style="list-style-type: none"> A. Container grown plants <ul style="list-style-type: none"> 1. Nursery cans and boxes 2. Flats and cell packs B. Bare root C. Balled and burlapped 	<p>Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.</p> <p>Describe integrated pest management methods for controlling selected pests and diseases.</p> <p>Formulate an annual maintenance calendar for a selected landscape.</p>
<ul style="list-style-type: none"> IX. Tree staking and guying methods 	<p>Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.</p> <p>Formulate an annual maintenance calendar for a selected landscape.</p>

<p>X. Lawn care:</p> <ul style="list-style-type: none"> A. Warm and cool season turf grass varieties B. Mowing, edging, watering, fertilizing C. Aerating and dethatching D. Repair of damaged and degraded turf <ul style="list-style-type: none"> 1. Spot seeding and sodding 2. Renovation and overseeding E. Lawn insect, disease and weed problems 	<p>Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.</p> <p>Describe integrated pest management methods for controlling selected pests and diseases.</p> <p>Formulate an annual maintenance calendar for a selected landscape.</p>
<p>XI. Introduction to pests and diseases of landscape plants:</p> <ul style="list-style-type: none"> A. Symptoms of pest and disease damage B. Pest and beneficial insects C. Weed identification <ul style="list-style-type: none"> 1. Annuals and perennials 2. Grasses and broadleaf weeds 3. Warm and cool season weeds D. Diseases caused by fungi, bacteria and viruses E. Vertebrate pests F. Abiotic causes of plant damage 	<p>Describe integrated pest management methods for controlling selected pests and diseases.</p> <p>Formulate an annual maintenance calendar for a selected landscape.</p>
<p>XII. Landscape pest management:</p> <ul style="list-style-type: none"> A. Integrated pest management concept B. Cultural practices C. Biological controls D. Pesticides <ul style="list-style-type: none"> 1. Insecticides, mlticides, herbicides, fungicides, rodenticides, molluscicides 2. Reading and following label directions 3. Safety precautions and protective equipment 4. Mixing and applying 5. Sprayer use and maintenance E. Using herbicides <ul style="list-style-type: none"> 1. Pre-emergent and post-emergent 2. Selective and non-selective 3. Contact and systemic F. Pesticide use regulations for landscape maintenance <ul style="list-style-type: none"> 1. Qualified Applicator Certificate (QAC) 2. County Agricultural Commissioner registration 	<p>Describe integrated pest management methods for controlling selected pests and diseases.</p>
<p>XIII. Professionalism in the landscape maintenance industry:</p> <ul style="list-style-type: none"> A. Importance of proper business practices and licenses B. Scheduling seasonal maintenance tasks annually C. Cost estimating and maintenance contracts D. Client relations and communications E. Certified Landscape Technician of Maintenance exam 	<p>Describe basic pruning systems applied to shade trees, shrubs, vines, perennials, roses and fruit trees.</p> <p>Describe integrated pest management methods for controlling selected pests and diseases.</p> <p>Formulate an annual maintenance calendar for a selected landscape.</p>

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 16 **and Title:** Plant Propagation
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 **Counseling and Non-Credit (Weekly):** 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Interpret graphs and statistical data.

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course teaches the principles of sexual and asexual propagation, seeding, cuttings, grafting, budding, and layering. The student will also be exposed to dedicated plant structures relating to propagation, specialized propagation media and rooting aids.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Toogood, Alan, *American Horticultural Society Plant Propagation*, (1 AMER ED/e). DK Publishing, Inc.. (1999).

Hartmann, H., Kestler, D., Davies, F., Geneve, R, *Hartmann & Kester's Plant Propagation: Principles and Practices*, (8/e). Prentice Hall. (2011).

notebook and pencil

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Distinguish the major structures of plants and their functions.

B. Explain the requirements of plant growth.

C. Analyze propagated plants for trueness to type.

D. Demonstrate the various techniques of plant propagation.

Student Learning Objectives:

Applies to all SLOs.

A. Propagate plants by sexual and asexual methods.

B. Understand how to collect seed and vegetative structures to propagate.

- C. Understand the different growing environments for different types of plants and propagation methods.

7. Course Content and Scope:

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
1. Assignments will be given from the required text(s)
 2. Assignments will be given from trade and industry publications on the reserve reading list.
 3. Assignments will be given from college publications dealing with landscape opportunities
- C. Required Writing Assignments:
1. Students will develop a oral and written presentation on plant propagation.
 2. Laboratory reports must be written
- D. Learning Activities Required Outside of Class:
1. Students will develop a oral and written presentation on plant propagation
- E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Distinguish the major structures of plants and their functions.	The student will develop an oral demonstration in front of the class. The student will apply principles learned in class to make critical cultural practice discussions in propagating and producing plants
Explain the requirements of plant growth.	The student will develop an oral demonstration in front of the class. The student will apply principles learned in class to make critical cultural practice discussions in propagating and producing plants
Analyze propagated plants for trueness to type.	The student will develop an oral demonstration in front of the class. The student will apply principles learned in class to make critical cultural practice discussions in propagating and producing plants
Demonstrate the various techniques of plant propagation.	The student will develop an oral demonstration in front of the class. The student will apply principles learned in class to make critical cultural practice discussions in propagating and producing plants

- F. Lab Content and scope:
1. Laboratory content is integrated with and contains the same content as lecture.

8. Methods of Instruction:

Student Learning Outcome	Methods
Distinguish the major structures of plants and their functions.	Lecture Other - VHS/DVD presentations Lab Demonstration Field Trips

Explain the requirements of plant growth.	Lecture Other - VHS/DVD presentations Lab Demonstration Field Trips
Analyze propagated plants for trueness to type.	Lecture Other - VHS/DVD presentations Lab Demonstration Field Trips
Demonstrate the various techniques of plant propagation.	Lecture Other - VHS/DVD presentations Lab Demonstration Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Distinguish the major structures of plants and their functions.	Oral Presentation - Term paper Laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers
Explain the requirements of plant growth.	Oral Presentation - Term paper Laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers
Analyze propagated plants for trueness to type.	Oral Presentation - Term paper Laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final exams which will include essay answers
Demonstrate the various techniques of plant propagation.	Oral Presentation - Term paper Laboratory reports Other - Laboratory exercises Other - Midterm and final exams which will include essay answers

10. COURSE CONTENT

Topic	Learning Outcomes
I. Introduction to Plant Propagation: A. Elementary botany and plant physiology related to sexual and asexual propagation B. Nomenclature related to propagation C. Future growth/employment	Distinguish the major structures of plants and their functions. Explain the requirements of plant growth. Analyze propagated plants for trueness to type.
II Structures, Media, Fertilizers, Soil Mixtures, and Containers used for Propagation: A. Greenhouses and structures B. Various growing media and applications C. Fertilizer blends and applications relating to plant propagation D. Soil mixtures and their components E. Container types and selection for various applications	Distinguish the major structures of plants and their functions. Explain the requirements of plant growth.
III. Sexual Propagation: A. The development of fruit, seeds and spores B. Principles and techniques of propagation by seeds C. Production of genetically pure seed	Distinguish the major structures of plants and their functions. Explain the requirements of plant growth. Analyze propagated plants for trueness to type. Demonstrate the various techniques of plant propagation.
IV. Asexual Propagation: A. Nature and importance of asexual propagation B. Genetic variation in asexually propagated plants C. Production and maintenance of pathogen-free, true-to-type clones D. Anatomical and physiological basis of propagation E. Techniques of propagation by cuttings, grafting, budding, layering, and specialized stems and roots	Distinguish the major structures of plants and their functions. Explain the requirements of plant growth. Analyze propagated plants for trueness to type. Demonstrate the various techniques of plant propagation.
V. Special Methods of Propagation: A. Aseptic methods of micro-propagation B. Techniques and procedures for tissue layering and culturing	Explain the requirements of plant growth. Demonstrate the various techniques of plant propagation.

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 17 **and Title:** Nursery and Garden Center Practice
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 Counseling and Non-Credit (Weekly): 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Interpret graphs and statistical data.

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course is a study of commercial retail nursery and garden center operations dealing with wholesale, and retail nursery practices, including plant care, merchandising and management practices.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Avent, Tony, *So You Want to Start a Nursery*, (1st/e). Timber Press. (2003).

Nelson, P, *Greenhouse Operation and Management*, (7/e). Prentice Hall. (2012).

Notebook and pencil

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.

B. Examine skills in sales and services, both wholesale and retail.

C. Analyze retail merchandising and display skills.

Student Learning Objectives:

Applies to all SLOs.

A. Design and build a retail display for a specific plant for our annual plant sale.

B. Grow various types of container plants and understand crop timing.

C. Understand costs associated with retail and wholesale nurseries.

7. **Course Content and Scope:**

A. Course Content, in outline form (attach on separate sheet)

B. Required Readings:

1. Reading assignments will be given from the required text.
2. Assignments will be given from various industry publications.
3. California Cooperative Extension Service bulletins will be available in the classroom for required readings.

C. Required Writing Assignments:

1. The student will develop sell sheets for specific plants.
2. Weekly laboratory reports will be completed.

D. Learning Activities Required Outside of Class:

1. The student will visit at least three nurseries in preparation for their term paper.
2. The student will design and create a retail display for the annual plant sale.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.	The student will design and install a retail display. The student will apply principles learned in class to make critical business practice decisions.
Examine skills in sales and services, both wholesale and retail.	The student will design and install a retail display. The student will apply principles learned in class to make critical business practice decisions.
Analyze retail merchandising and display skills.	The student will design and install a retail display. The student will apply principles learned in class to make critical business practice decisions.

F. Lab Content and scope:

1. Demonstrate organizational skills in nursery and floristry operations.
2. Prepare an order for horticultural supplies using current catalogs and resources.
3. Maintain production records based on greenhouse output.
4. Analyze and prepare a nursery/greenhouse weed management schedule.
5. Prepare a merchandising presentation for a selected plant.
6. Prepare and maintain a nursery operation calendar for a given month

8. Methods of Instruction:

Student Learning Outcome	Methods
Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.	Lecture Other - Slide/tape presentations Lab Demonstration Field Trips

Examine skills in sales and services, both wholesale and retail.	Lecture Other - Slide/tape presentations Lab Demonstration Field Trips
Analyze retail merchandising and display skills.	Lecture Other - Slide/tape presentations Lab Demonstration Field Trips

9. Methods of Evaluation:

Student Learning Outcome	Assessments
Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.	Other - Retail Display Laboratory reports Other - Laboratory exercises Other - Midterm and final examinations which will include essay answers
Examine skills in sales and services, both wholesale and retail.	Other - Retail Display Laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final examinations which will include essay answers
Analyze retail merchandising and display skills.	Other - Retail Display Laboratory reports Other - Laboratory exercises Other - Lecture quizzes Other - Midterm and final examinations which will include essay answers

10. COURSE CONTENT

Topic	Learning Outcomes
<p>I. Introduction to the floriculture and nursery industry:</p> <p>A. Jobs available and background needed to obtain them</p> <p>B. Licenses, permits, and certificates required, recommended, available</p> <p>C. How the industry is organized in California</p> <p>D. Laws and regulations that affect the horticulture industry</p> <p>E. How laws are made, interpreted, and enforced in California</p>	<p>Examine skills in sales and services, both wholesale and retail.</p>
<p>II. Computer applications in managing a horticultural enterprise:</p> <p>A. Computer basics</p> <p>B. Word processing</p> <p>C. Spread sheets</p> <p>D. Other software</p>	<p>Examine skills in sales and services, both wholesale and retail.</p>
<p>III. Sales and Service:</p> <p>A. Wholesale sales and brokering</p> <p>B. Retail sales - florist</p> <p>C. Retail sales - nursery</p> <p>D. Skills related to salesmanship</p> <p>E. Communication styles and biases</p>	<p>Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.</p> <p>Examine skills in sales and services, both wholesale and retail.</p> <p>Analyze retail merchandising and display skills.</p>
<p>IV. Merchandising strategies:</p> <p>A. Merchandising techniques for retail florists</p> <p>B. Merchandising techniques for retail nurseries</p> <p>C. Display work and silent sales techniques</p> <p>D. Pricing and costing product</p>	<p>Examine skills in sales and services, both wholesale and retail.</p> <p>Analyze retail merchandising and display skills.</p>
<p>V. Marketing:</p> <p>A. Advertising</p> <p>B. Market research</p>	<p>Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.</p> <p>Examine skills in sales and services, both wholesale and retail.</p> <p>Analyze retail merchandising and display skills.</p>
<p>VI. The role of professional organizations and cooperatives:</p> <p>A. Professional organizations for nursery & floriculture.</p> <p>B. Wire services</p> <p>C. Other professional organizations</p> <p>D. Cooperatives</p>	<p>Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.</p> <p>Examine skills in sales and services, both wholesale and retail.</p> <p>Analyze retail merchandising and display skills.</p>
<p>VII. Elements of supervision:</p> <p>A. One way and two way communications</p> <p>B. Language barriers</p> <p>C. Techniques to enhance communications On the job</p> <p>D. Organizing and delegating</p> <p>E. Praising and correcting</p> <p>F. Teaching techniques</p>	<p>Demonstrate skills and knowledge in the operation of a retail and wholesale nursery.</p> <p>Examine skills in sales and services, both wholesale and retail.</p> <p>Analyze retail merchandising and display skills.</p>

VIII. Record Keeping: A. Business records and statements B. Performance and cost analysis C. Production records D. Sales records E. Business plans F. Dealing with banks and financial institutions G. Contracts and legal documents	Demonstrate skills and knowledge in the operation of a retail and wholesale nursery. Examine skills in sales and services, both wholesale and retail. Analyze retail merchandising and display skills.
IX. Office Machine Skills: A. Adding machine B. Fax machine C. Telephones and systems D. Copy machines E. Cash registers	Demonstrate skills and knowledge in the operation of a retail and wholesale nursery. Examine skills in sales and services, both wholesale and retail. Analyze retail merchandising and display skills.

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** LAND 50 **and Title:** Residential Gardening
2. **Units** 3 **Hours:** Lecture (Weekly): 3 (Per Term): 54 Lab (Weekly): 0 (Per Term): 0 TBA (Weekly): 0 (Per Term): 0 Counseling and Non-Credit (Weekly): 0 (Per Term): 0

Number of "in the classroom" hours: 54

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Apply a variety of rhetorical strategies, including argumentation, to write clearly-focused, fully-developed, and logically-organized essays which conform to the conventions of standard, written, academic English

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course teaches the basic needs in residential gardening. Included in this course are plant identification, basic landscape design, sprinkler installation and care, fumigation and lawn installation, pruning, pest and disease recognition and control, soils, fertilization, and weed control. Also included will be foliage plant care for interiors.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Editors of Sunset Magazine, *The New Sunset Western Garden Book*, (9th/e). Menlo Park Oxmoor House, Incorporated. (2012).
Notebook and pencil

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

- A. Demonstrate knowledge of fifty common landscape plants.
- B. Apply techniques of sprinkler installation and care.
- C. Apply techniques in pruning roses, shrubs, and trees.
- D. Examine different soils, fertilizer, and their use.

Student Learning Objectives:

Applies to all SLOs.

- A. Understand methods of plant propagation
- B. Understand Botanical Nomenclature.
- C. Develop their own vegetable garden at their residence.
- D. Evaluate environmental conditions for optimum plant growth.

7. **Course Content and Scope:**

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
 - 1. Assignments and reading will be given from the required text.
 - 2. Assignments will be given from gardening publications.

3. University of California Cooperative Extension Service bulletins will be available in the classroom.

C. Required Writing Assignments:

1. assignments for the plant sale will be given out for sell sheets, marketing, plant labels etc.

D. Learning Activities Required Outside of Class:

1. The student will visit several retail nurseries and garden centers to view new plants and landscape supplies.

E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Demonstrate knowledge of fifty common landscape plants.	The student will apply principles learned in class to make critical cultural practice decisions in care for horticultural plants. Students will attend our annual plant sale and help sell product.
Apply techniques of sprinkler installation and care.	The student will apply principles learned in class to make critical cultural practice decisions in care for horticultural plants. Students will attend our annual plant sale and help sell product.
Apply techniques in pruning roses, shrubs, and trees.	The student will apply principles learned in class to make critical cultural practice decisions in care for horticultural plants. Students will attend our annual plant sale and help sell product.
Examine different soils, fertilizer, and their use.	The student will apply principles learned in class to make critical cultural practice decisions in care for horticultural plants. Students will attend our annual plant sale and help sell product.

F. Lab Content and scope:

8. Methods of Instruction:

Student Learning Outcome	Methods
Demonstrate knowledge of fifty common landscape plants.	Lecture Multi-media - Slide/tape presentations Demonstration
Apply techniques of sprinkler installation and care.	Lecture Multi-media - Slide/tape presentations Demonstration
Apply techniques in pruning roses, shrubs, and trees.	Lecture Multi-media - Slide/tape presentations Demonstration
Examine different soils, fertilizer, and their use.	Lecture Multi-media - Slide/tape presentations Demonstration

9. Methods of Evaluation:

Student Learning Outcome	Assessments
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Demonstrate knowledge of fifty common landscape plants.	Other - Lecture quizzes Other - Assigned reports Other - Midterm and final exams which will include essay answers
Apply techniques of sprinkler installation and care.	Other - Lecture quizzes Other - Assigned reports Other - Midterm and final exams which will include essay answers
Apply techniques in pruning roses, shrubs, and trees.	Other - Lecture quizzes Other - Assigned reports Other - Midterm and final exams which will include essay answers
Examine different soils, fertilizer, and their use.	Other - Lecture quizzes Other - Assigned reports Other - Midterm and final exams which will include essay answers

10. COURSE CONTENT

Topic	Learning Outcomes
I. Plant Identification A. Basic plant identification, terminology, and techniques B. Grouping of plants according to horticultural characteristics, i.e., size, rate of growth, environmental preferences C. Shrubs, trees, ground covers, vines, annuals-perennials, house plants	Demonstrate knowledge of fifty common landscape plants.
II. Landscape Design A. Basic elements and aesthetics of landscape design B. Plant selection based on ecological and plant needs and requirements	Demonstrate knowledge of fifty common landscape plants. Examine different soils, fertilizer, and their use.
III. Sprinkler Installation and Care A. Elementary residential system design and layout B. Installation techniques and practices C. Troubleshooting and maintenance of sprinkler systems D. Sprinkler component identification	Apply techniques of sprinkler installation and care.
IV. Lawn Installation A. Methods and options for residential lawn installation B. Steps to installing a successful lawn	Demonstrate knowledge of fifty common landscape plants. Apply techniques of sprinkler installation and care. Apply techniques in pruning roses, shrubs, and trees. Examine different soils, fertilizer, and their use.
V. Pruning Practices A. Techniques used in pruning trees, shrubs and bedding plants B. Tool and equipment identification and use Identifying soil types and structure Evaluating soil conditions and needs	Demonstrate knowledge of fifty common landscape plants. Apply techniques in pruning roses, shrubs, and trees.
VI. Pest and Disease Recognition and Control A. Identification of the pests and diseases commonly found in the residential garden B. Proper and legal methods of control C. Pesticide mixing and application methods	Apply techniques in pruning roses, shrubs, and trees. Examine different soils, fertilizer, and their use.
VII. Soils A. Identifying soil types and structure B. Evaluating soil conditions and needs	Examine different soils, fertilizer, and their use.
VIII. Fertilizers and Amendments A. Identification of products available for residential use B. Determining amount of product to apply for a given situation C. Setting up a fertilizer schedule routine	Examine different soils, fertilizer, and their use.
IX. Weed Control A. Identification of common residential weeds B. Methods used to control common weeds C. Herbicide mixing and application methods	Apply techniques in pruning roses, shrubs, and trees. Examine different soils, fertilizer, and their use.

X. Indoor Foliage Plant Care A. Special needs required by indoor plants	Demonstrate knowledge of fifty common landscape plants. Examine different soils, fertilizer, and their use.
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Course Dates:

Implementation Date: Summer 2014

Board of Trustees: Jun 18, 2013

Effective: May 24, 2014

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Course Outline

1. **Course Number:** PLSC 10 **and Title:** Elements of Plant Science
2. **Units** 3 **Hours:** Lecture (Weekly): 2 (Per Term): 36 Lab (Weekly): 3 (Per Term): 54 TBA (Weekly): 0 (Per Term): 0 **Counseling and Non-Credit (Weekly):** 0 (Per Term): 0

Number of "in the classroom" hours: 90

3. **ENTRANCE SKILLS:**

Prerequisite: Before entering the course the student should be able to: NONE

1-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

2-Way Co-requisite Skills: During the course the student should acquire the ability to: NONE

Advisory Skills: Upon entering the course it is recommended that the student be able to:

ENGL 85

Linked Student Learning Outcomes:

Apply critical reading strategies to analyze, paraphrase, and summarize a variety of texts including outside sources

Apply a variety of rhetorical strategies, including argumentation, to write clearly-focused, fully-developed, and logically-organized essays which conform to the conventions of standard, written, academic English

Develop reading and writing skills in a computer-based setting

MATH 80

Linked Student Learning Outcomes:

Interpret graphs and statistical data.

Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.

Evaluate expressions involving square roots, ratios, proportions, and percents.

Evaluate expressions composed of real numbers including whole numbers, integers, fractions, decimals, and exponents without the use of a calculator.

Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

Limitation on Enrollment: NONE

Recency and Other Measures of Readiness: NONE

4. **Catalog Description:**

This course is designed to provide the students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops will be included.

5. **Typical Text(s), Author/Edition, Publication Date(s) and Supplies**

Hartmann, McMahon, *PLANT SCIENCE*, (New/e). Prentice Hall. (2007).

Notebook

Pencil

6. **Student Learning Outcomes:** Upon successful completion of the course, the student should be able to verbally or in writing:

A. Examine the basic functions of plant processes.

B. Analyze how crops grow with understanding of environmental and managerial conditions.

C. Demonstrate proper management and care of crops, vegetables, and ornamental plants.

D. Explain crop genetics and research development of crop or ornamental improvements.

Student Learning Objectives:

Applies to all SLOs.

- A. Classify plants by their botanical nomenclature.
- B. Distinguish between, ornamental, vegetable and fiber crops.
- C. Grow plants from seed, cuttings and division.

7. Course Content and Scope:

- A. Course Content, in outline form (attach on separate sheet)
- B. Required Readings:
 - 1. The student will complete weekly assignments from the text and class handouts.
 - 2. The student will turn in a collection of ten article reports that relate to plant science.
- C. Required Writing Assignments:
 - 1. The student will write a report on an item pertaining to class once a week in a journal.
 - 2. The student will be required to take notes.
- D. Learning Activities Required Outside of Class:
 - 1. The student will complete reading and note taking on assigned reading.
 - 2. The student will spend time in the library researching and writing reports using the library online resources.
 - 3. Students will develop a plant collection of 5 weeds, 5 trees, 5 perennials and 5 annuals. These items will be pressed and provide documentation.
- E. Assignments or Activities that Demonstrate Critical Thinking:

Student Learning Outcome	Activities
Examine the basic functions of plant processes.	The student will have to synthesize handouts and live lab demonstrations. The student will be asked to deduce and explain conclusions presented in class both verbally and written. The student will apply, compare, and contrast instruction in lecture and laboratory settings.
Analyze how crops grow with understanding of environmental and managerial conditions.	The student will have to synthesize handouts and live lab demonstrations. The student will be asked to deduce and explain conclusions presented in class both verbally and written. The student will apply, compare, and contrast instruction in lecture and laboratory settings.
Demonstrate proper management and care of crops, vegetables, and ornamental plants.	The student will have to synthesize handouts and live lab demonstrations. The student will be asked to deduce and explain conclusions presented in class both verbally and written. The student will apply, compare, and contrast instruction in lecture and laboratory settings.
Explain crop genetics and research development of crop or ornamental improvements.	The student will have to synthesize handouts and live lab demonstrations. The student will be asked to deduce and explain conclusions presented in class both verbally and written. The student will apply, compare, and contrast instruction in lecture and laboratory settings.

F. Lab Content and scope:

1. Plant a tree on campus to solidify a connection between soil, water, and plant structures.
2. Propagate plants by sexual and asexual methods.
3. Go on plant walks to collect samples of plants for students plant collection.
4. Evaluate soil by texture.
5. Visit the college farm to see crop production.

8. **Methods of Instruction:**

Student Learning Outcome	Methods
Examine the basic functions of plant processes.	Class Discussion Lecture Demonstration Other - Slides and tape presentations
Analyze how crops grow with understanding of environmental and managerial conditions.	Class Discussion Lecture Demonstration Other - Slides and tape presentations
Demonstrate proper management and care of crops, vegetables, and ornamental plants.	Demonstration Other - Laboratory activities
Explain crop genetics and research development of crop or ornamental improvements.	Class Discussion Lecture Demonstration Other - Slides and tape presentations

9. **Methods of Evaluation:**

Student Learning Outcome	Assessments
Examine the basic functions of plant processes.	Other - Plant Collection Other - Midterm and final exams which will include essay questions Other - Laboratory exercises Class Participation
Analyze how crops grow with understanding of environmental and managerial conditions.	Other - Plant Collection Other - Midterm and final exams which will include essay questions Other - Laboratory exercises Class Participation
Demonstrate proper management and care of crops, vegetables, and ornamental plants.	Other - Laboratory exercises Class Participation
Explain crop genetics and research development of crop or ornamental improvements.	Other - Midterm and final exams which will include essay questions Other - Laboratory exercises Class Participation

10. COURSE CONTENT

Topic	Learning Outcomes
I. Plant and Human Dependency A. Crop plants B. Energy and crop production D. World population vs. crop production E. Agriculture, pollution, and the environment	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Explain crop genetics and research development of crop or ornamental improvements.
II. Nature of Crop Plants A. Origin and classification B. Structure and function C. Growth and development D. Reproduction and propagation	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Demonstrate proper management and care of crops, vegetables, and ornamental plants. Explain crop genetics and research development of crop or ornamental improvements.
III. Plant Environment in Relation to Agricultural Production A. Light (artificial, natural) B. Heat (soil, atmospheric) C. Soil (nutrients, pH, and structure) D. Water (salinity, quantities, drainage) E. Climate and crop geography	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Demonstrate proper management and care of crops, vegetables, and ornamental plants. Explain crop genetics and research development of crop or ornamental improvements.
IV. Scientific Method A. Cropping systems and practices (and analysis of) B. Crop nutrition C. Crop hazards D. Crop improvements E. Research in crop evaluation	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Demonstrate proper management and care of crops, vegetables, and ornamental plants. Explain crop genetics and research development of crop or ornamental improvements.
V. Industry of Plant Agriculture A. Food crops: cereals, legumes, forages B. Food crops: roots, stems, fruits C. Plant extractive and derivatives D. Fiber, forest, and ornamental crops	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Demonstrate proper management and care of crops, vegetables, and ornamental plants. Explain crop genetics and research development of crop or ornamental improvements.
VI. Economics of Crop Production and Distribution A. Labor requirements B. Transportation availability C. Marketing of crop	Examine the basic functions of plant processes. Analyze how crops grow with understanding of environmental and managerial conditions. Demonstrate proper management and care of crops, vegetables, and ornamental plants.

Credit by Exam Grade Form for LAND 11 – Hands-on Demonstration Requirements

Student Name _____

Possible Points Student Score Instructor Initials

Fertilizers Place fertilizers on table have students fill in handout #1	10		
Plant Structures and Functions: Have students find parts of plants to bring to you and ID See Handout #2	10		
Soils and Container Media: Layout samples of items from Handout #3 and as to ID	10		
Plant Propagation: Provide plant material for the following methods of propagation: Terminal/sub terminal cuttings, seed, division. Students will explain the requirements of, and demonstrate the method of propagation	10		
Pest and Disease Damage Identification: ID Beneficial as well as detrimental insects as well as Abiotic and/or Biotic plant damage	10		
Horticultural Structures: ID different types of glazing or covering materials and the +'s and -'s of each See handout #4 for activity	10		
Landscape Horticulture Business and Marketing Methods: Have students visit a retail nursery and fill out handout #5	10		
Nursery and Greenhouse Crops – Planting and Care: Demonstrate methods of transplanting and crop care (pinching, watering, deaheading)	10		
Plants in the Landscape: Demonstrate proper planting of a tree on campus per Cal Fire Specs. Two handouts 6&7	10		
Plant Identification and Nomenclature: 10 plants Genus, species and common See handout #8	10		
Point Total	100		

A= 90-100 C = 70-79
B = 80 - 90 D = 60-69

Instructors Signature _____

Grade: _____

Fertilizer look up – Handout #1 for Credit by Exam

LAND – 11

Name _____

#1

What is the name of the Fertilizer?

What is the purpose of this product?

What is the % Nitrogen?

What is the % Phosphorus?

What is the % Potassium?

What is the application rate?

Organic or Inorganic

#2

What is the name of the Fertilizer?

What is the purpose of this product?

What is the % Nitrogen?

What is the % Phosphorus?

What is the % Potassium?

What is the application rate?

Organic or Inorganic

#3

What is the name of the Fertilizer?

What is the purpose of this product?

What is the % Nitrogen?

What is the % Phosphorus?

What is the % Potassium?

What is the application rate?

Organic or Inorganic

#4

What is the name of the Fertilizer?

What is the purpose of this product?

What is the % Nitrogen?

What is the % Phosphorus?

What is the % Potassium?

What is the application rate?

Organic or Inorganic

Plant Structures and Functions – Handout #2 for Credit by Exam – Page 1

LAND 11

Name _____

Find one example of the following:

Types of Leaves:

- ☐ Simple
- ☐ Pinnate
- ☐ Palmate

Leaf Arrangement;

- ☐ Opposite
- ☐ Alternate

Leaf margin

- ☐ Smooth
- ☐ Serrated

Find a flower and identify its parts. Do you know the difference between a perfect and imperfect flower? Which is yours?

Plant Structures and Functions – handout #2 for Credit by Exam – Page 2

QUIZ

Name _____

Write the appropriate letter of the type of leaf below each picture.

- (A) Simple
- (B) Pinnately compound
- (C) Palmate

Define Annual as it relates to plant science.

Define Perennial as it relates to plant science.

Circle the petiole on the picture below

Soils and Container Media – Handout #3 for Credit by Exam

LAND 11

ID Quiz

Name: _____

4" or quart container	#15 container	6" pot
#1 container	6 pack	8" pot
#5 container	Propagation flat	10" pot
Half flat (carrying)	Carrying flat	Perlite
Half flat (propagation)	Peat moss	Plug Tray
Transplant mix	Bark	

1) _____	7) _____	13) _____
2) _____	8) _____	14) _____
3) _____	9) _____	15) _____
4) _____	10) _____	16) _____
5) _____	11) _____	17) _____
6) _____	12) _____	

GREENHOUSE ADVENTURE

Name _____

Select from the following list and write in the name of the greenhouse component that corresponds with the correct number.

Poly covering	Heater	Pad (cooling)	Thermostat
Glass Covering	Fan	Mist	

Greenhouse A _____ Covering

#1 _____

#2 _____

#3 _____

#4 _____

#5 _____

Greenhouse B _____ Covering

#6 _____

#7 _____

#8 _____

#9 _____

#10 _____

Landscape Horticulture Business and Marketing Methods – Handout #5 for Credit by Exam

LAND 11

Nursery Visit

Your Name: _____

Your hometown and Sunset zone: _____

Nursery you visited: _____

Nursery location: _____

Directions: Visit a full-service retail nursery convenient to you. Go to a nursery that sells a full range of plants and hard goods: seeds, bulbs, annuals, perennial, shrubs, trees, fertilizers, pots, etc. As best as possible based on the nursery you visit, answer these questions. Please don't ask salespeople to complete your assignment.

Locate the BEDDING PLANT section:

Define Bedding Plant:

List six different bedding plants that they have available are they warm season or cool?

List two different vegetables are they warm season or cool season?

What are the prices for bedding plants sold as:

6-packs _____

Half flats/49 ers _____

Locate the perennials. What are the costs for the following:

4" or quarts _____

#1 _____

Locate the SEED rack displaying individual packets of seeds.

List six different cool – season vegetables suitable for planting now.

CAREFUL!! Check the packet copy because not everything on the rack is ok for planting right now.

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

What is the average price of a pack of seed?

Find the shade tree section.

Select a tree that will grow in your zone. List the Botanical and common name

How much does a #15 tree cost? _____

Plants in the Landscape

Handout #6 for Credit by Exam

LAND 11

**Guideline Specifications for:
Nursery Tree
Quality**

Guideline Specifications for Nursery Tree Quality

Revision 2009

BACKGROUND

This document is a revision of a previous publication entitled *Guideline Specifications for Nursery Tree Quality*, published by the Urban Tree Foundation, which was developed by a committee of horticulture professionals from the nursery, landscape, municipal, consulting, and academic sectors. The original publication has been posted online at the Foundation's Web site (<http://www.urbantree.org/specs.asp>) since 2002 and has been used by public, private, and nonprofit groups to select and specify quality nursery trees. Recommendations for improvements to the document received in the past 5 years have been incorporated in this 2009 revision.

The following people worked on the original *Guideline Specifications for Nursery Tree Quality*:

David Burger, UC Davis Department of Plant Sciences
Barrie Coate, Consulting Arborist, Los Gatos
Larry Costello, UC Cooperative Extension, Half Moon Bay
Robert Crudup, Valley Crest Tree Company, Sunol
Jim Geiger, US Forest Service, Pacific South West Region
Bruce Hagen, California Department of Forestry and Fire Protection, Santa Rosa, Retired
Richard Harris, Professor Emeritus, UC Davis Department of Plant Sciences
Brian Kempf, Urban Tree Foundation, Visalia
Jerry Koch, City of Berkeley Division of Urban Forestry, Retired
Bob Ludekens, L. E. Cooke Company, Visalia
Greg McPherson, US Forest Service, PSW Research Station, Center for Urban Forest Research
Martha Ozonoff, California ReLeaf, Davis
Ed Perry, UC Cooperative Extension, Stanislaus County
Markio Robert, Caltrans LDA Maintenance Division, Oakland

Illustrations by Edward F. Gilman, Professor, Environmental Horticulture Department, IFAS, University of Florida. Adaptions from *Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines*, 4th ed., by R. W. Harris, J. R. Clark, and N. P. Matheny (Prentice Hall, 2003).

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Urban Tree Foundation
115 S. Dollner Ave.
Visalia, Ca 93291
www.urbantree.org
brian@urbantree.org

Introduction

This document provides specifications for selecting and specifying quality nursery trees in California, with a focus on container stock. Key traits of nursery trees are identified and described to provide growers and buyers with the information they need to distinguish good-quality stock from poor-quality stock. Structural and health characteristics are described, as well as labeling, compliance with laws and regulations, and inspection of nursery stock. If a particular defect or substandard element can be corrected easily, appropriate remedies should be applied as agreed upon by both parties.

I. GENERAL SPECIFICATIONS

A. Proper Identification: All trees shall be true to name as ordered or shown on planting plans and shall be labeled individually or in groups by species and cultivar (as appropriate).

B. Compliance: All trees shall comply with federal and state laws and regulations requiring inspection for plant disease, pests, and weeds. Inspection certificates required by law shall accompany each shipment of plants. Clearance from the local county agricultural commissioner, if required, shall be obtained before planting trees originating outside the county in which they are to be planted. Even though trees may conform to county, state, and federal laws, the buyer may impose additional requirements.

C. Inspection: The buyer reserves the right to reject trees that do not meet specifications as set forth in these guidelines or as adopted by the buyer. If a particular defect or substandard element can be corrected easily, appropriate remedies shall be applied. If destructive inspection of a root ball is to be done, the buyer and seller should have a prior agreement as to the time and place of inspection, number of trees to be inspected, and financial responsibility for the inspected trees.

D. Delivery: The buyer shall stipulate how many days prior to delivery that delivery notification is needed. Buyer shall stipulate any special considerations to the nursery prior to shipment.

II. HEALTH AND STRUCTURE SPECIFICATIONS

These specifications apply to deciduous, broadleaf evergreen, and coniferous species. They do not apply to palms. Note that leaf characteristics will not be evident on deciduous trees during the dormant season.

A. Tree Health

1. Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar. Changes in form caused by wind, pruning practices, pests, or other factors shall not substantially alter the form for the species or cultivar.

2. Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress as indicated by wilted, shriveled, or dead leaves.

3. Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.

4. Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds (except properly made pruning cuts), sunburned areas, conks (fungal fruiting bodies), wood cracks, bleeding areas, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).

5. Roots: The root system shall be substantially free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Root distribution shall be uniform throughout the container substrate, and growth shall be appropriate for the species or cultivar. At time of inspection and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by stunted, discolored, distorted, or dead roots.

B. Tree Crown

Note: Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multistem, clump, or unique selections such as contorted or weeping cultivars.

1. Trees shall have a single, relatively straight central leader. They shall be free of codominant stems and vigorous, upright branches that compete with the central leader. If the original leader has been headed, a new leader at least one-half of the diameter of the original leader shall be present.

Not topping is desirable.

Topping and retaining a leader is desirable.

Topping without retaining a leader is not desirable.

2. Main branches shall be well distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.

Desirable

Not Desirable

3. Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch.

Desirable

Not Desirable

4. The attachment of the largest branches (scaffold branches) shall be free of included bark.

Desirable

Not Desirable

5. Temporary branches, unless otherwise specified, should be present along the lower trunk below the lowest main (scaffold) branch, particularly for trees less than 1 inch in caliper. These branches should be no greater than 3/8 inch diameter. Clear trunk should be no more than 40% of the total height of the tree.

Desirable

Not Desirable

C. Trunk

1. The trunk shall be free of wounds (except properly-made pruning cuts), sunburned areas, conks (fungal fruiting-bodies), wood cracks, bleeding areas, signs of boring insects, galls, cankers and/or lesions.

2. Trunk caliper and taper shall be sufficient so that the tree will remain vertical without a stake. Trunk caliper at 6 inches above the soil media (substrate) surface shall be within the diameter range shown for each container size below:

Container Size -----Trunk Diameter

5.....0.5" to 0.75"

15.....0.75" to 1.5"

24-inch box.....1.5" to 2.5"

Desirable

Not Desirable

D. Roots

1. The uppermost roots or root collar (root crown) shall be within the upper 2 inches of the soil media (substrate).
2. The root collar and the inside portion of the root ball shall be free of defects, including circling, kinked, and stem girdling roots. Soil removal near the root collar may be necessary to inspect the aforementioned root defects.

Desirable

Not Desirable

3. Roots on the periphery and bottom of the root ball shall be less than 1/4 inch in diameter (1/8 inch is preferred). The maximum acceptable root diameter on the periphery should be indicated.

Desirable

Not Desirable

4. The tree shall be well rooted in the soil media (substrate). Root distribution shall be uniform throughout the container media. Structure and growth shall be appropriate for the species/cultivar. When the container is removed, the root ball shall remain intact. When the trunk is lifted both the trunk and root system shall move as one.
5. At the time of inspection and delivery, the root ball shall be moist throughout. The crown shall show no signs of moisture stress as indicated by wilted, shriveled, or dead leaves or branch dieback. The roots shall show no signs of excess soil moisture as indicated by poor root growth, root discoloration, distortion, death, or foul odor.

III. INSPECTION

The buyer reserves the right to reject trees that do not meet specifications as set forth in these guidelines or as adopted by the buyer. If a particular defect or substandard element or characteristic can be easily corrected, appropriate remedies are encouraged. If destructive inspection of a root ball or balls is to be done, the buyer and seller should have a prior agreement as to the time and place of inspection, minimum number of trees to be inspected or percentage of a species or cultivar, and financial responsibility for the inspected trees.

VI. DELIVERY

The buyer should stipulate how many days prior to delivery that notification is needed.

GLOSSARY:

caliper. Trunk diameter measured 6 inches from the ground; if caliper is greater than 4 inches, the caliper measurement is taken at 12 inches from the ground.

central leader. A continuation of the main trunk located more or less in the center of the crown, beginning at the lowest main branch (scaffold) and extending to the top of the tree. Also referred to as the **dominant leader**.

circling roots. One or more roots whose diameter is greater than 10% of the trunk caliper circling more than one-third of the trunk.

clear trunk. The portion of the trunk below the crown lacking lateral branches; this includes the portion of the trunk with shortened temporary branches that are below the main crown.

codominant. Two or more vigorous, upright branches or stems of relatively equal size that originate from a common point, usually where the leader was lost or removed.

crown. The portion of a tree beginning at the lowest main (scaffold) branch extending to the top of the tree.

cultivar. A named plant selection from which identical or nearly identical plants can be produced, usually by vegetative propagation or cloning.

included bark. Bark embedded in the union between a branch and the trunk or between two or more stems that prevents the formation of a normal branch bark ridge.

kinked root. A main mother root that is sharply bent.

leader. The dominant stem that usually develops into the main trunk.

photosynthate. Sugar and other carbohydrates that are produced by the foliage and stems during photosynthesis.

root collar. The base of a tree where the main roots and trunk meet. Also referred to as the **root flare**.

scaffold branches. Large main branches that form the main structure of the crown.

stem-girdling root. A circling, bent, or straight root that touches or rests on the trunk or root flare that can become a permanent root.

temporary branch. A small branch that is temporarily retained along the lower trunk of young trees.

trunk. The main stem of a tree, beginning at the root collar and ending at the lowest main scaffold branch.

taper. The thickening of a trunk or branch toward its base.

Plants in the Landscape

Handout #7 for Credit by Exam – LAND 11

Tree Planting Specifications -

California Department of Forestry and Fire Protection

- 1) All tree planting stock to be planted using these "Planting Specifications" shall conform at minimum to the Specification Guidelines for Container-Grown Landscape Trees issued by the California Department of Forestry & Fire Protection (CDF); [Appendix E]
- 2) Trees are to be planted in accordance to the landscape plan as well as adhering to current recognized horticultural practices.
- 3) Trees shall be planted so that the root ball is equal to or slightly higher than the surrounding soil surface. **Shallow is better than deep! Most people plant trees too deep. A hole three times the width of the root ball is often recommended but about one-and-one half the diameter is more common. Roots can become deformed by the edge of the hole in compacted or clayey soils if it is too small. The depth of the hole should be LESS than the height of the root ball, especially in compacted or natural wet soils. If the hole was inadvertently dug too deep, add soil and compact it with your foot. Breaking up compacted soil in a large area (out of the drip line of the tree) around the tree provides the newly emerging roots room to expand into loose soil. This will hasten root growth translating into quicker establishment.**

Proper Planting Detail

If you form a berm of soil around the root ball to hold irrigation, keep it less than about 4 inches high. Water held in a taller berm simply runs through the root ball. It might be more appropriate to make the berm from mulch since the berm typically ends up on top of the root ball eventually. Placing soil over the root ball cuts off oxygen and water.

When planting on slopes set the tree so the top-most root in the ball on the uphill side is about even with the soil. The side of the root ball on the downhill side will be well above the surrounding soil. Bring in enough soil to cover the sides of the root ball with soil. Apply mulch to finish the planting job as shown in the diagram above.

- 4) The trunk flare (root crown) shall be evident and free of any container soil and/or planting backfill. **The trunk flare (root flare, root crown) is the abrupt swelling where roots join the trunk. This point should be visible at the top of the root ball. If the trunk flare is not visible, remove soil or media from the top of the ball until it is visible.**

5) The root flare shall be slightly above the surface of the surrounding soil at all times. When planting on a sloping site, the top-most root in the root ball shall be even with the grade on the uphill side of the tree. **Site soil will need to be added on the downhill side to cover the sides of the root ball and to construct the soil berm to hold water. It is better to plant the tree a little high than to plant it too deep. If the tree is a little deep, tip it to one side and slide some soil under it; then tip it back the other way and slide some more soil under the root ball. Continue this until it is set at the appropriate depth. Once it is at the appropriate dept, place a small amount of soil around the root ball to stabilize it. Soil amendments should only be used as needed. The soil removed from the hole generally makes the best backfill.**

6) Tree stock will be protected from excessive vibration; avoiding being thrown or bounced off mobile equipment to the ground. Trees shall not be dragged, lifted, or pulled by the trunk or foliage parts in a manner that will loosen the roots in the ball. **To avoid damage when setting the tree in the hole, lift the tree with straps or rope around the root ball, not be the trunk. Special strapping mechanisms need to be constructed to carefully lift trees out of large containers.**

7) Planted trees shall exhibit no circling root conditions or evidence of untreated root bound container stock. Check rooting structure of the container tree for possible root bound conditions and implement corrections if needed.

circling roots growing up into this media on top. Position the top-most root about even with or slightly above the top of the landscape soil.

Pot bound (also called root bound) root balls from containers have large or many roots on the outer edge of the ball. It is best not to plant trees in this condition because roots could girdle the trunk as the tree grows. The tree could also become unstable later because few supporting roots grow from the outside curved portion of a root. If you must plant a tree with circling roots, these roots should be cut with a knife or pruning tool to prevent them from girdling the tree later, especially if they are near the top of the root ball. Make three or four slices in inch deep from the top of the root ball to the bottom. If in doubt about whether a root is large enough to cut, go ahead and cut it. Research shows that if there is a growth reduction from root pruning container grown trees at planting, the effect is negligible. Other work shows a reduction in shoot growth following root slicing if plants are under irrigation. Recent studies show that slicing the root ball from the top to bottom in several locations does not increase root growth after planting. It does; however, appear to enhance distribution of regenerated roots in the backfill soil profile. Instead of growing almost exclusively from the bottom of the root ball, slicing encourages root regeneration along the slices from the top to the bottom of the root ball. This could help establish the plant quicker by allowing the roots to quickly explore a larger volume of backfill soil.

8) Trees shall all be planted in an upright position avoiding appearances of leaning. **Before you begin backfilling, have someone view the tree from two directions perpendicular to each other to confirm the tree is straight. Fill in with some more backfill soil to secure the tree in the upright position. Once you add large amounts of backfill, it is difficult to reposition the tree.**

9) Planting tree site (hole) shall reflect proper techniques in the use of backfill soil materials to avoid evidence of large air pockets/voids within the backfill soil profile. **Attempt to break up clayey soil clumps as much as possible. Do NOT step firmly on the backfill soil because this could compact it and restrict root growth, especially in clayey soil. Fill the hole around the root ball with soil. When the hole is filled with soil, the root ball should remain 2 to 3 inches above the backfill soil. Slice the shovel 20 to 30 times into the backfill to settle the soil. Add 10 to 20 gallons of water to the root ball and backfill. Fill in any holes or depressions with additional backfill soil. Do not firmly pack backfill soil in an attempt to eliminate air pockets because this could cause too much soil compaction. The water infiltrating the backfill soil will eliminate the large air pockets. The presence of small air pockets could even be of benefit because they could allow more air to reach the roots.**

10) All synthetic materials from around the tree trunk and root ball shall be removed and not evident within the backfill soil mix. **String, rope, synthetic burlap, plastic, strapping, and other materials that will not decompose in the soil shall be removed at planting.**

11) Optional treatment: Cover the planted tree root ball area with mulch. **Apply mulch material to at least a 6-foot diameter circle around the tree. Construct a berm out of mulch at the edge of the root ball only if the tree will be watered with a hose, bucket, or other high volume means. Constructing a berm in all other situations will not provide more water to the root system. Do not construct a berm from soil since this soil could end up over the root ball several months later. Water the mulch well after it is spread. Mulching: Weed and turf suppression during establishment is essential. Application of 4+ inches of mulch (after settling) is highly recommended to help discourage weeds. This area should be maintained during the establishment period at least two feet in diameter for each inch of tree trunk diameter (minimum diameter should be six feet for trees with a trunk diameter less than 3 inches). If you wish to place mulch over the root ball, apply only a thin layer over the outer half of the root ball. This keeps the trunk dry and allows rainwater, irrigation, and air to easily enter the root ball area.**

12) Support trunk staking that was supplied with the container tree has been removed. **Many nursery vendors provide single or double support tree stakes to minimize trunk/crown damage during transporting activities. These support stakes left on the young tree after it is planted in the ground will often inflict wounds to the trunk and lower limbs of the young tree. This transport staking is not needed when 1) proper caliper in tree stock diameter is adhered to in the tree purchase process and/or 2) proper support staking discussed under item 13 below is utilized and installed correctly.**

13) Proper tree staking utilized, if necessary. **If the root ball moves in the wind, emerging roots could break and the trees will establish slowly. Staking to hold a weak trunk upright should not be necessary on trees with a trunk diameter more than about 1.5 inches. If large trees require staking to prevent the trunk from bending, it probably indicates a lesser quality tree (reflecting a failure to meet minimum container nursery stock purchase specifications). Smaller trees might require staking until enough trunk strength develops. Trees could establish more quickly and develop a slightly stronger trunk and root system if they are NOT staked at the time of planting; assuming quality nursery stock is utilized. Should staking be utilized, the following staking systems will be considered as minimum standards: Double Stake Support System, ReddyStake Support System, Alternative Staking System as illustrated.**

Reddy Stake Support System

Double Stake Support System

Alternative Staking Systems

Container and bare root trees often require stakes to hold them firm in the soil until roots become established. Root balls must remain firm and stable in the soil so the fragile new roots growing into the backfill soil are not broken as the root ball moves in windy weather.

Traditional staking systems are shown in Figures 1-3. All three traditional systems require removal within one year after planting. Figures 4 and 5 show two systems used successfully by urban foresters throughout the country. Both of these inexpensive alternate systems eliminate the requirement to return to the tree to remove the staking system because they simply decay in a few years. Figure 6 shows an alternative, synthetic mulching material useful along streets and highway medians. Tree shelters or plastic tubes can increase survival of very small seedlings, but may have little or no use for standard sized planting stock. Their use has been associated with retarded trunk diameter growth, damage from birds, mechanical damage from trunks rubbing in the tube, ice and snow loading damage, reduced root systems, and delayed dormancy.

<p>Figure 1: Three short stakes (2 shown) attached to the trunk with rubber or similar stretchable material. Stakes driven in as shown above may be better secured in the soil than those shown in Figure 2.</p>	<p>Figure 2: Three short stakes (2 shown) driven into soil in a traditional manner attached to the trunk with stretchable material.</p> <p>Use a wide strapping or rubber to secure stakes to trees.</p>	<p>Figure 3: Two or three (2 shown) 2 x 2 wood stakes driven through the backfill soil.</p> <p>Do not use wire in garden hose to secure trees because these can injure or girdle the tree.</p>
<p>Figure 4: Two or three (2 shown) wood dowels driven through edge of root ball. These do not have to be removed because they simply rot in place. There is no danger of this system girdling the trunk since nothing is attached to the trunk.</p>	<p>Figure 5: One horizontal 2 in. x 2 in. screwed to two vertical 2 x 2s against the side of the root ball. A second set is used on the other side if needed for larger trees.</p>	<p>Figure 6: Synthetic mulch, in this case made from rubber, can be used as an organic mulch replacement in areas where organic mulch could blow or float away.</p>

Minimum Maintenance Requirements

1. Provide a minimum of weekly watering during the dry season. Keep turf and ground covers at least 18 inches away from edge of root ball. Use some type of organic mulch to retain moisture.
2. Provide developmental pruning for strong and characteristic structure at three (3) years old and again at seven (7) years old as a minimum service level.
3. Provide needed pest control for the health of the tree.
4. Provide required staking to ensure stability and proper growth. Remove the nursery stake and use two stakes placed outside the root ball and tie loosely with soft, flexible tree ties to allow for some movement. Other staking systems may be used if approved by a California Department of Forestry and Fire Protection (CDF) Urban Forestry Field Specialist.

Stake trees until the tree is capable of supporting itself in windy conditions, usually for one to two seasons.

A Guide to the Water Needs of Landscape Plants

L. R. Costello and K. S. Jones

UNIVERSITY OF CALIFORNIA - COOPERATIVE EXTENSION

Recommended Watering Practices - Revised 4/1/94

- Irrigate trees planted during the dry season 2 to 3 times a week for the first two months and twice a week thereafter until the rainy season. It may be necessary to water more frequently during particularly hot, dry weather.
- Construct a watering berm around the planting hole and a smaller inner temporary berm immediately around the root ball to help retain water.
- Apply water to both basins **immediately** after planting.
- The inner berm will help keep the root ball moist until roots grow out into the fill soil and beyond. (usually 6 to 8 weeks)
- Irrigate trees planted in the late winter to early spring on a weakly basis, when rain is lacking.
- Begin watering twice a week with the approach of warm, dry weather - apply water to wet the soil to the planting hole depth. Keep the soil moist not wet. Too much water is just as bad as too little.
- During the second year, water on a weekly basis beginning in the late spring continuing through early fall. *Water the soil area under the expanding leafy canopy, allowing enough time for the water to penetrate the soil to a depth of 6 to 12". If drip irrigation is used, expand the system as the tree grows.*
- By the third year, monthly deep watering should suffice.
- Many trees will thrive with 2 to 3 deep watering applied during the summer of the fourth or fifth year.
- Some trees will survive the summer with no further irrigation.
- Most trees will benefit from periodic, but infrequent deep watering, particularly during droughts.
- It may be necessary to make adjustments in watering frequency and duration depending on soil type, weather, drainage and tree species.

Explain crop genetics and research development of crop or ornamental improvements.

Course Dates:

Implementation Date: Summer 2013

Board of Trustees: Jun 18, 2013

Effective: May 25, 2013

Last Outline Revision: Apr 18, 2013

CC Approval: Apr 18, 2013

Title 5 Review: Apr 18, 2013

Origination Date: Feb 06, 2009

Merced College Advisory Committee
October 13th, 2014

The meeting was called to order by Darol Fishman at 6:14 PM

Members present:

Steve Mua	Tim Donovan	Bill Weir
Bill Crivelli	Steve Obad	Doug Thiel
Ken Williams	Jean Obad	Jim Williamson
Bryan Tassey	Steve Bell	Jim Cunningham
Don Emerick	Kim Donaher	Katie Dumford
Darol Fishman	Matthew Terra	Denise Skidmore
Dino Migliazzo	Alpha Gipe	Elaine Valladao

Dinner was served and the business meeting began at 6:50 PM

Special Presentation – Darol Fishman

Bill Weir was presented with a Resolution from the Merced College Academic Senate recognizing 20 years of academic and professional service to the students of Merced College. The members of the Agriculture Division also presented him with a card and gift certificate for him and his wife Carol. Thank you Dr. Weir for all you have done for Merced College and the field of Agriculture.

Dean's Report – Jim Andersen

- Dean Jim Andersen presented the CTE Program Completer Data complimenting the many CTE programs for the great work they have done in increasing the number of completers in both certificates and degrees.
- He pointed out the increases in numbers with the 3 programs that had been a part of the TAACCCT Grant which include Mechanized Agriculture, Welding and Industrial Electronics.
- Dean Andersen also provided information to the committee dealing with the importance of an embedded CTE Counselor as well as a CTE Job Placement Coordinator and the affects both of these had on the students involved in the TAACCCT Grant. He noted that he has been working with the powers that be to try and find the resources to sustain these two critical components of the 8 Guiding Principles of the grant.
- Also presented was information regarding Transfer Model Curriculum and that the Agriculture sector was the only one in the state that had been able to secure three TMC's specific to subject matter areas: Plant Science, Ag. Business and Animal Science.

Faculty and Program Reports

Botanical Garden Master Plan Update – Bryan Tassey

- Bryan presented a campus master plan map of the location of the proposed botanical garden which is closer to fruition that it was 7 years ago when the process started. Merced College has had a complete change of administration which is now 100% behind the project and very active in its planning. The Tree Partners and Jim Williamson were critical in getting it off the ground by providing the seed money for the architectural rendition of the project.
- Jim Williamson made a motion to have the committee approve the addendum to the Facilities Master Plan to include the 10 acre Botanical Garden as presented on 10/13/14 by Bryan Tassey. Steve Obad seconded the motion. Discussion ensued: Dino Migliazzo questioned who would facilitate and fund the ongoing expenses. Bryan explained the involvement with both manpower and finances from The Tree Partners, Cal Fire and Mercy Gardens. To date, two grants of 1.5 million dollars have been applied for through

Cal Fire and The Tree Partners have agreed to \$75,000 in donation to make this thing happen. The project could also include the Merced County Master Gardeners. The motion passed by unanimous voice vote.

Farm Update – Steve Bell

- Steve reported the Pumpkin Sale was coming up and this weekend would be the first of three to take place. It's done more as a public outreach activity to get the community out to see and experience the Merced College Farm. He has had elementary schools take a field trip so their students could partake. Steve has formed a Pumpkin Sale Committee to get students more involved and to manage the sale.
- He gave a report on the crop rotations and contractual agreements. Due to the lack of water and the agreement with Azteca, no corn was planted. Winter forage will be planted in its place and hay will be harvested from that crop. He also mentioned that the squirrels had decimated the almonds so yield was way down from years past.
- He is working with Helena Chemical to set up some plots to be used for experimental crop practices.
- The Farm has a new Caterpillar crawler to be used for ripping. He is in the process of securing a Wilcox ripper to go behind the new machine.

AggieFest – Kim Donaher

- Kim presented and handed out information regarding AggieFest and how important the support of the community was needed to make it happen. She also cited those events it helped to fund including CAL leadership activities, sending students to the PLANET Student Career Days, and scholarships

Student Achievements and Accolades

- Darol Fishman reported on the results for the 2014 PLANET Student Career Days for the eight Merced College students who participated.
- Jaime Farao reported on the results of the three students who participated in the Dairy Judging contest at the World Dairy Expo in Madison, Wisconsin.
- Jaime also presented a slide show showcasing the results of the Merced Livestock Show Team in the intercollegiate division at the Big Fresno Fair.

Subject Matter Area Meetings

Each instructor adjourned to meet with their respective committees.

The General Meeting was adjourned by Darol Fishman at 8:05 PM

Respectfully submitted,

Darol Fishman

ARTICLE IX

Evaluation and Tenure

The purposes of evaluation are to assure effectiveness in and improvement of instruction and educational services. Evaluation to the extent possible shall include sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, and ethnic backgrounds. The final granting of tenure is a Board of Trustees' right.

The evaluation of faculty shall be limited to the evaluatee's primary areas of responsibility. The main items for consideration in evaluation of faculty are:

1. Effectiveness in working with students.
2. Expertise in subject matter or areas of responsibility.
3. Techniques of instruction, guidance, student health services, or library practices.
4. Acceptance of responsibility.

All evaluation teams shall be conducted through the team approach and will include student evaluations. Evaluation teams vary from one to three members (see "composition of evaluation teams" under the respective faculty category).

1. Only tenured faculty shall act as members of an evaluation team for full-time faculty.
2. Tenured faculty shall be required to participate in up to two evaluations in their area of expertise each academic year. Additional participation shall be voluntary.
3. Any full-time or part-time faculty may evaluate part-time faculty.
4. The immediate supervisor of the evaluatee in coordination with the appropriate Faculty Lead will initiate and monitor the evaluation process for timeliness and due process.
5. Forms developed for the purpose of evaluation and tenure shall be mutually agreed to by the Association and the District.

Frequency of evaluation and composition of evaluation teams:

Regular (Tenure) faculty: Regular faculty will be evaluated every third year in keeping with the requirements of the Education Code relating to college faculty and evaluations.

The evaluation team will consist of one or more faculty members from an appropriate area of expertise chosen by the evaluatee.

Contract (Non-tenured, tenure track) faculty and temporary faculty: All contract and temporary faculty shall be evaluated at least once in each academic year. Contract faculty shall be evaluated at least once a year for four years, unless tenure is granted earlier.

The evaluation team will consist of the Faculty Lead or a discipline faculty selected by the Faculty Lead, a faculty member from an appropriate area of expertise selected by the evaluatee and the evaluatee's immediate supervisor or designee. The evaluatee shall be responsible for selecting a faculty member who is willing and able to serve as an evaluator.

Adjunct faculty: Adjunct faculty shall be evaluated in the first year of employment and thereafter at least once every three years.

The evaluation team will consist of a faculty designee from an appropriate area of expertise.

ARTICLE XIV **Faculty Lead**

1. Selection. Each Cohort shall select by secret ballot a Faculty Lead for the next academic year. To be selected, a candidate must receive a simple majority of the votes cast. All candidates must be tenured faculty members. Only a full-time faculty member may vote in the election of a Faculty Lead. A full-time faculty member may cast a total vote of one (1) in his/her primarily assigned Cohort only. The term of the Faculty Lead shall be one year. Thereafter, if the Faculty Lead position is retained into the next contract, terms shall be for two (2) years.

If the Faculty Lead is permanently vacated, a special election will be held and the newly elected Faculty Lead will serve the duration of the original term.

The term of Faculty Lead shall begin on July 1 of each academic year and end on June 30 of that same academic year.

2. Annual Workload and Compensation. The annual workload and compensation shall be standard for all Faculty Leads and is comprised of the following:
 - a. Length of contract – 175 days per year, corresponding to instructional days . The Faculty Lead (or designee) and the Dean may determine up to 18 hours per year to be worked during the summer break and/or winter break. These hours will be counted toward the faculty member's flex hour obligation and therefore will be voluntary on the part of the Faculty Lead (or designee).
 - b. Compensation – 3 units of release time per semester. A Cohort may decide to split the 3 units amongst two Faculty Leads @ 1.5 units per Faculty Lead or may split the 3 units amongst three Faculty Leads @ 1 unit per Faculty Lead. The decision to split the Faculty Lead position must be decided by a majority of the Cohort members.

If a Cohort votes to have more than one Faculty Lead, the duties, as listed below, may be divided up amongst the Faculty Leads of the Cohort.

3. Responsibilities. The Faculty Lead will:

- a. Participate in evaluations of full-time tenure track faculty.

The Faculty Lead will serve as a member of the evaluation team for at most three tenured or tenure-track faculty members per semester. If more than three of this type of evaluation opportunity arises, the Faculty Lead may indicate a discipline designee to take his/her place on the evaluation team.

- b. Coordinate evaluations for adjunct faculty.

The process regarding Adjunct Evaluation and the Faculty Lead:

- (1) The Dean submits a list to the Faculty Lead indicating adjunct faculty to be evaluated.
- (2) The Lead seeks volunteers from the faculty for these evaluations.
- (3) The Lead sends the list of the volunteers to the Dean. If necessary, the Dean assigns faculty to fill vacant evaluator positions.
- (4) The Dean sends notification to those faculty members being evaluated.
- (5) The evaluator sets a time to meet with the adjunct faculty member and follows through with the process, eventually reporting back to the Dean.
- (6) The Dean monitors the entire process and ensures that all paperwork is complete.

- c. Work in consultation with the Dean and in conjunction with discipline faculty in the development of faculty workload, faculty class schedules and the schedule of courses.
- d. Participate in hiring adjunct faculty.

The Faculty Lead or designee participates in the hiring of adjunct faculty.

- e. Serve as a liaison between the faculty and Dean.

The Faculty Lead shall meet on a regular basis and as needed with his/her Area Dean. Any pertinent information gained through meetings or other means of communication, e.g. emails from the Dean/Administration will be forwarded in a timely manner by the Faculty Lead to the Cohort members.

The Faculty Lead or designee shall attend the monthly Instructional Council meeting and report back information to the Cohort members via email or through a meeting.

The Faculty Lead shall chair Cohort meetings – and develop the agenda through recommendations made by the faculty and Dean.

- 4. Recall and Resignation. A Faculty Lead may resign at any time or may be relieved of his/her duties by:
 - a. The Superintendent/President of the College with the approval of the majority of the Cohort and/or the approval of the Board of Trustees, or
 - b. The majority vote by secret ballot of the Cohort with the approval of the Superintendent/President and/or the Board of Trustees.
- 5. The Faculty Lead of a Cohort does not necessarily have to be a member of the Cohort.
- 6. Each Cohort shall have one (1) Faculty Lead (a total of 3 units or reassign time), except for the English Cohort which has two (2) Faculty Leads (a total of 6 units of reassign time) and the Guidance Cohort which may have a maximum of two (2) Faculty Leads (3 units of reassign time for each at a maximum of 6 units of reassign time). The Guidance Cohort, by majority vote, determines if it should have 1 or 2 Faculty Leads.

The Merced College Faculty Association and the Merced College District agree that the language pertaining to the Faculty Lead Article XIV and the Evaluation and the Tenure Article IX is valid from July 1, 2009 through June 30, 2010. This language sunsets on June 30, 2010. If both parties agree before June 30, 2009 then this language will not sunset.

District Representative

Date _____

Faculty Assn. Representative

Date _____

District Representative

Date _____

Faculty Assn. Representative

Date _____

Effective with the spring semester of 2008, MCCD and MCFA agree that tenured faculty ascending to the position of Area Dean have full retreat rights to their original discipline for a period of two years dated from the first day of employment as an Area Dean.

Signature

Date

Signature

Date

MCCD and MCFA mutually agree that until September 1, 2008, faculty members may submit service points earned in previous years, with a maximum of seven service points from previous years. (Those who are planning on withdrawing banked load during spring 2009 and using previous years' service points must turn in their report by May 23, the end of the spring 2008 semester.) Moreover, submittal of previous years' service points must be only for those activities specified in Article V of the current contract or on the list of "Service Point Additions" revised 3/6/08 and available on MC-NET. A separate service points reporting form will be developed for the time period up to September 1, 2008.

Starting in the academic year 2008-09 this side letter is the notification that all service points need to be submitted during the academic year claimed, no later than June 30 of that year.

Caroline Dawson, MCFA President

Date

Larry M. Johnson, MCCD

Date

Landscape Horticulture

1. Description of the Program

- a. Please identify the individuals who participated in the completion of this program review and provide documentation of discussions pertaining to the program review.

Bryan Tassey

- b. Mission:

- i. Mission Statement:

The Landscape Horticulture Program at Merced is designed to meet the need for trained personnel in a broad range of occupational opportunities involved with or related to the Landscape Industry.

- ii. How is this mission statement communicated to students and the rest of the campus?

Catalog

Program Brochures

Other -- High School visits, Garden Club and local Rotary and the Tree Partners Foundation.

- iii. How does the mission align with the College's overall mission?

Directly. Institutional SLO's are very comparable.

- c. Program History & Description:

- i. Identify major changes and/or developments, including change or growth in other programs, which have significantly impacted your program.

The facilities have been upgraded significantly. Irrigation was not functional when I started and now boasts a central control system and over 40 valves. 29 boxes have been installed with irrigation to serve as our year-round vegetable garden. The entire outside nursery has been expanded and upgraded to include raised benches and a functional growing bay base material.

- ii. Please provide a description of your program.

The Merced College Landscape Unit includes greenhouses, lath house, a spacious growing grounds, twenty nine raised bed veggie garden and potting area. Facilities available to the Landscape Unit include a large school farm, laboratories, classrooms, and a beautifully landscaped campus. These facilities provide excellent opportunity for study and practice in the production and use of ornamental plants both for sale and for use in the landscape.

The Landscape Horticulture student receives well-rounded training in his field by being exposed to Tree and Plant Identification, Landscape Design, Construction and Maintenance, and finally, Nursery and Garden Center Practice. All courses deal with the entire range of activities within that particular area such as landscape uses of plants, plant propagation, basic irrigation and sprinkler systems. The legal aspects of the field are covered in the Landscape Construction and Installation course when local codes and state requirements for licensing are taught.

- d. Resources

- i. Describe the types of facilities and equipment used by the program and the extent to which these resources meet program needs.

Two greenhouses all for year round growing and are both equipped with heaters and coolers. In the "poly" house a mist system has been installed to propagate cuttings in mass. Our shade house allows for hardening off of

plant material and provides an optimal growing area for shade plants. The Veggie garden provides PLSC-10 students with the opportunity to learn by doing in a semi controlled environment. The Toro Dingo is a piece of equipment that is vital to nursery production and gives students hands on experiences for the Landscape Industry.

- ii. Discuss how technology is used to deliver instruction or enhance student learning and the extent to which available technologies meet program needs.

Rainbird IQ is a central control irrigation system that is PC based. All classes benefit directly (training on how the system works) or indirectly with the settings that allow for accurate irrigation scheduling for crops. The Mech Ag computer lab has provided my students the opportunity to do research, social media (LinkedIn), and presentations. In my classroom there is a podium pc, document camera, and projector that are used daily for instruction.

e. Staffing

- i. Describe how the program is staffed. Include the following:

- FTEF (Full-time Equivalent Faculty), full time faculty
- FTEF, part-time faculty
- # of full-time faculty
- # of part-time faculty
- # of support staff
- # of Coordinators and/or Program Managers (including amount of reassigned time dedicated to each position)
- Organization Chart: If an organizational chart is relevant to your program, please include one as an attachment

One full-time faculty. When I started this program there was an instructional support tech that was hired. My first semester that position went away and now needs to be revisited as the nursery has been significantly developed and instructional opportunities for students are now exponential.

f. Professional Development

- i. Discuss the program's expectations for professional development by faculty (full-time and part-time) and staff and the extent to which faculty and staff engage, or would like to engage, in professional development activities.

I would like to continue attending industry trade shows and conferences. Maintain my certified arborist certificate and become a certified irrigation auditor.

g. Curriculum

- i. Course Currency

1. Are all courses in your defined program current according to their Title 5 review dates? Yes

2. Are you planning on changing, updating or revising any degree or certificate requirements? Yes

3. Will you be making changes to your program mission or SLOs? No

Please list the planned changes. (Changes must be submitted through CurricUNET)

4. Do you plan to develop any new courses or programs, or new Distance Ed versions of existing courses? No

Please explain?

5. Is a recommended sequence of courses relevant to your program? If so, is the current sequence up-to-date? No

How is the sequence advertised to students?

2. External Factors

a. Identify which external factors have a significant impact on your program, and explain how these factors impact your program. Please consider the following where appropriate:

- Budgetary constraints or opportunities
- Service area demographics
- Requirements of 4-year institutions
- Requirements of Prospective employers
- Job Market
- Developments in the field (both current and future)
- Competition from other institution
- Requirements imposed by regulations, policies, standards, and other mandates (if these include external reviewing bodies or grants, please address those below)
- Other

With the current economy a lot of people are either trying to update their current landscape skills or learning a new career field all together. Irrigation requirements in the state have been significantly updated. Students are interested in learning about irrigation efficiency.

b. Advisory Committee(s)

- Name of Advisory Committee:

Tree Partners Foundation

- Committee Role:

Meet quarterly and evaluate, recommend, and collaborate with the Merced College Horticulture Program.

- Membership:

Jim Williamson
Joan Faul
Richard Dodson
Patrick Farretta
Joan Faul

- Describe how the committee's recommendations are implemented:

The committee recommendations are folded into the Horticulture Program by purchasing materials, types of plants required for projects and the annual sale, and implement joint programs.

3. Response to Prior Program Review

No prior review is in the system.

- No historical information.

4. Identification of Outcomes (SLO or SAO)

a. SLO Grid

[SLO Grid](#)

b. SLO Assessment Plan

- Include a plan for assessing the course and program SLOs you have not assessed at this time.

My SLO's were updated Spring 2013 for all classes in LAND as well as the

PLSC-10 class that I teach. All classes that I teach have been updated and have an appointment with the area CAT to make a plan for assessment.

5. Review of Data (Quantitative and Qualitative)

a. Student Access:

- i. Briefly outline which students are served in your program(s). Look at age, gender, and ethnic/racial breakdowns. Compare demographics by site, time, modality, and ultimately, to the district's demographics for the same term.

See the attached excel file for specific comparison.

Age for the program is similar between the institution and my program when comparing the largest percent served which is age group 20-24 (see high lighted area). The major difference is my program attracts a broad spectrum of ages and in the older age categories the percent is double that of the institution.

Gender is almost completely opposite when comparing. My program has 65% Male to the institution's 43% while Female is 34% compared to 57% respectively.

Race/Ethnicity was very interesting. The largest population served for the program is White, Non-Hispanic(51%) and the institution is Hispanic at 47%.

- ii. What are total program enrollments and FTES? (Break down by discipline, degree, certificate, or course(s) where appropriate.)

182 FTES 2007F-2012F

- iii. What is the total number of sections offered? Provide a breakdown of sections by site modalities when appropriate.

4 Sections, I am the only teacher for all of the sections offered. All are a 3 unit classes = 15 load units.

- iv. What is the average class size?

An average of 24.

- v. What is the average percentage of sections filled?

87%

- vi. What is the site-based/distance education learning ratio for the program?

N/A

b. Student Learning Outcomes

- i. Discuss the process used by faculty in identifying course- and program-level student learning outcomes (SLOs) and the type of assessment used to measure those outcomes.

This is the start of my fifth year teaching full time and in previous work experience was in the Industry. Utilizing my advisory committee, Industry contacts, and my own experience, I have been able to update my SLO's for all classes Spring 2013.

- ii. Summarize the findings of student learning outcomes assessments completed in the last two years, or since the last review.

1. Course:

The findings are they were severely out of date and there were simply too many. In some instances there were 25 different SLO's for one class.

2. Program:

I need to update the Program SLO's next. I made it a priority to update the classes first as it directly affect instruction and I need to justify what I needed when applying for Perkins and resource allocation funding.

c. Other Outcomes and Measures

i. Required

1. Success

The average is 72% but the trend since I have been teaching has increased from 64% in 207F to 82% in Spring 2013.

Failure rate is 27% with a decrease from 36% in 2007 to 17% in 2013.

The institution success rate is 66% with a failure rate of 33%. My program is proving to show student success both statistically and also in job placement.

2. Retention

Could not find data. The tutorial was not helpful

3. Productivity (WSCH/FTEF)

446.71

4. Number of transfers to 4-year college or university

Unclear where to find data. I know for sure two students to UC Davis.

5. Degrees Awarded

Certificates (2)

AS (3)

AA (9) six of which were in 2012-13

ii. If you have chosen other quantitative or qualitative measures to gauge your program's effectiveness, please identify them here, and briefly describe the results

6. Analysis of Data and Evaluation

a. Student Access

i. What did you learn about access to your program?

It was interesting to see the numbers but I am a one person department so since I teach every class offered I have a very good idea of student access.

ii. How do your program demographics compare across sites and modalities?

N/A

iii. How do your program demographics compare to the District aggregate?

Already discussed in the "Review of Data" A spread sheet has been provided in the appendices.

iv. Is access equitable across all modalities and sites?

N/A

v. What significant factors could be influencing student access to your courses or program?

Lack of understanding of counselors on what the program is and how often are classes offered. I have given a presentation to all counselors and gave them my rotation of classes and explained the program.

vi. Is there variability in enrollments between fall to spring, spring to fall? What factors could contribute to this trend?

Nothing to note. Some of my classes are offered every other year so it is

hard to compare apples with apples in regards to the question.

b. Student Learning Outcomes

i. How well do your program learning outcomes represent:

1. The scope and depth of learning appropriate to the following, and how do you know?

The program SLO's will be looked at again but are in line with a general understanding of the program. I know this because I have been in the Industry for a decade prior to teaching.

2. The degree/certificate program offered?

I will be removing the AA degree and only offering an AS and a Certificate.

3. The standards of your discipline or profession/occupation

It generally represent the profession and occupations well. Horticulture is a very diverse industry including but not limited to the three major areas of concentration, Nursery production, Design, and Landscape maintenance/construction.

c. Analyze the results of student learning outcomes assessments.

i. Courses level:

My courses are now up to date and align with Industry standards and recommendations of what they are looking for in an employee.

ii. Program level:

The outcomes cover all needs of the Industry and reconditions of the Advisory Committee.

d. Other Outcomes and Measures

- i. What did you learn from your evaluation of the other measures identified in section 5.C above?

e. Overall Program Evaluation and Improvement

- i. What did you learn about your program's strength and weaknesses from your evaluation of Student Access, Student Learning Outcomes, and Other Outcomes and Measures?

I learned that I have a very unique program that serves a broad range of age and ethnicity. As the one and only instructor I have a good pulse on my students (customers).

- ii. Identify any improvements you have already implemented as a result of your evaluation, and describe briefly how those changes have improved student learning or program effectiveness, if that information is available yet.

I have continued to recruit at the high school level and at the local garden clubs.

- iii. Identify any improvements you plan to implement as a result of your evaluation, and describe briefly how you expect those changes to improve student learning or program effectiveness.

I have made drastic improvements on the facilities on site. Horticulture students need to touch and feel their subject matter. Everything we do involves our outdoor lab.

7. Planning for 5 Years

Goal Statement 1: Develop a Botanical Garden on campus

Objectives:

- Gain approval from the Board of Trustees
- Create a fundraising committee

Target Date for Completion: 05/31/2014

Person(s) Responsible for Completion: Bryan Tassey

Benchmark: November 1st attend Facilities committee requesting direction
December 2013 Board Meeting present concept Feb 2014 - The district will hire a firm to update the facilities master plan. May 2014 final approval from the Board.

Program Outcomes:

1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
8. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
9. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Strategic Planning Goals:

1. Assure student access and success.
2. Improve communication throughout the district.
3. Partner with the community.
4. Promote a Sustainable, Supportive, and Safe Learning Environment.

ISLOs:

1. Global and Community Consciousness and Responsibility
2. Personal Development and Life-Long Learning

Goal Statement 2: Improve the Nursery size and quality on campus.

Objectives:

- Install additional irrigation and growing bays for increased production.
- Acquire materials (plants, soil, containers, etc) for nursery production.

Target Date for Completion: 05/31/2015

Person(s) Responsible for Completion: Bryan Tassey

Benchmark: The size of the nursery should reflect the size of the program. As more students become involved the nursery must expand to meet the needs. Student numbers will dictate the size of the nursery for example if the instructor has three sections of PLSC-10 vs two that's 30 more flats of plant material per lab potentially and space and materials must be developed.

Program Outcomes:

1. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
2. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
3. Given an area to be landscaped and customer parameters, plan a workable landscape design including the bid and customer presentation.
4. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
5. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
6. Demonstrate the ability to perform the hands on skills and abilities to build / construct various projects related to the Landscape industry. These will include, but not be limited to, carpentry, electrical, plumbing and irrigation, concrete, site preparation, and bid and job estimation.
7. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
8. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
9. Identify and select the most appropriate plants and trees with the decision based on the environment conditions, plant characteristics and customer preferences.
10. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
11. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.
12. Faced with either a hypothetical or actual problem dealing with plantings or sprinkler/irrigation systems and the appropriate references, determine a solution to the problem.

Merced College - Perkins Title I-C (VTEA) Local Application

Please read the instruction very carefully and include all information requested.

Attached is the Local 2015-16 Perkins Title C-1 (VTEA) Application. The application process will be completed in two phases. The first phase of the application is attached and due by Friday, October 31st 2014. This phase concentrates on; Part I, the Program Improvement Cover Sheet, and Part II, the project proposal(s). Please save your applications with your program name as part of the file name and once completed, email it to the Dean of your Area. (due date 10-31-14) Your applications will be reviewed by the Dean of your Area, the Merced College VP's, and a VTEA Advisory Committee Review Process. At this point, those proposals approved for funding will complete the second phase of the application. The second phase is retrieving the core indicator and student success data. This will take place when the Chancellor's Office makes the Core Indicator information available (sometime in mid-January to mid-February).

You will note that the Cover Page (Part I) contains a hyperlink that will take you to the CuricUNET site where the IPR's are located. The answers to the questions on cover page come directly from Section III of your current Program Review.

The second page of the application, (Part II) is where you create the Project Proposal(s) The Project Proposal Narrative on that page comes directly from Section IV of your current Program Review. If you have multiple project proposals to address your Program Improvement Plan, they must be listed on separate Part II pages and must be listed in order of priority and numbered to reflect their priority ranking.

The Project Proposal Budget is the third page and when completed should reflect the total cost of the project as it is broken down into the various types of expenses (Salaries, services, supplies, and equipment). Again, each project proposal must have a separate budget page as well.

Before a project will be approved, all equipment, supplies, software, and travel requested must have a quote included with the application and be in an electronic format and pasted onto the blank pages at the end of the application. In addition, all additional information requested on the budget sheet (**written in red**) of the application must also be included with the application before a project will be approved.

Keep in mind that all resources requests must be supported by a current comprehensive review as well as a current annual program review in the years following the comprehensive review.

If you have any questions feel free to contact Jim Andersen at x6396.

Thanks,

Jim Andersen
Merced College
Dean of Instruction, Area 3
Agriculture - Industrial Technology - Life Fitness
Office (209) 384-6396
Email - andersen.j@mccd.edu

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds

PART I: Cover Page

Program Improvement Plan

As stated in Section III of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture **Program TOP Code:** 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

On the following two questions; first give details to the “Big Picture” as it relates to the overall program improvements needing to be addressed, and in question two, explain what steps are being taken to address these program needs. Each Program only needs to submit one Cover Page.

- A. Briefly describe program improvement issue(s) concerning this TOP code and include specific examples. (Limited to 2,000 characters, or approximately ½ page of text.)**

As the Horticulture program grows so must the nursery in order to provide a vital hands on learning laboratory for students to gain marketable skills. Support staff in the form of a works study student will be important in the implementation of the resources requested for this application. Students need to be exposed to current trends and equipment in the industry so they can hit the ground running in the career path of their choice. It's important to understand that plants are living breathing entities and require materials to help them grow and flourish. A tremendous amount of effort has been put in to find additional sources of funding from the community and industry to support this program. Industry and community partners include but are not limited to Tree Partners Foundation, RainBird Corp, Takao Nursery, Frantz Nursery, Big Creek Lumber, American Taki, Rotary International, Merced Garden Club, LeGrand Garden Club, and UC Master Gardeners. It's vital to stay current with industry both in equipment and supplies and professional development. This is the start of my 6th year teaching and funding has been requested to visit a tradeshow.

- B. Briefly describe how the issue(s) will be addressed. (Limited to 2,000 characters, or approximately ½ page of text.)**

The expansion of the nursery will be addressed with my priority #1. Containers, propagation supplies and soil are being requested. A request for a digital camera and travel would help develop new curriculum and provide enhancement of our social media platforms.

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 1 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Nursery Supplies for new greenhouse

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

In the Fall of 2014 a new greenhouse was installed and the materials requested are to support this facility for instructional purposes. Soil is listed and will serve a potting media. General nursery supplies, hoses, containers, pruners. Carts are listed to facilitate plant material being moved around the nursery and for customers at our plant sale. There are a few safety items that are needed from Bishop Co quote for the Landscape Maintenance class.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒
(Place an X next to the correct response)
If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.
N/A

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

McCONKEY
12321 WESTERN AVE
GARDEN GROVE, CA 92841
714-894-0581

Quotation

QUOTE #	203661
LOCATION	GARDEN GROVE
DATE	09/18/14
PAGE	1 OF 2

BILL TO

115727
MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

SHIP TO

MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

QUOTE DATE 09/18/14	EXPIRE DATE 10/18/14	SALES REP 11 /	WRITTEN BY KATHY VUKAN	PAYMENT TERMS O.A.C. NET 30 DAYS
CONTACT BRYAN TASSEY	PHONE 209-384-6301	EMAIL	SHIP VIA LEAST EXPENSIVE WAY	

PRODUCT / DESCRIPTION	PACK COUNT	QUANTITY	PRICE	U/M	EXTENSION
JMCD10LTC 10" COLOR BOWL LT. TERRA COTTA 100/CS	100	1	74.6685	CS	74.67
DRACSY34100 COLORSTORM YELLOW HOSE 3/4" 100' 17313	1	2	116.8100	EA	233.62
DRA750PLC LEMON HEAD WATER BREAKER ULTRA SOFT WITH LOWER FLOW	1	3	11.4088	EA	34.23
JMCM1020-1MB 1020 MESH FLAT BLACK 50/BNDL 48/PT	50	1	29.9402	CS	29.94
JMCTR1GB TALL ROUND 1 GL BLACK 144/BG	144	20	34.8326	BG	696.65
JMCM17S-1B 17"SQ PROPAGATION FLAT BLACK 60/BNDL 30CS/PLT	60	15	57.5085	CS	862.63
JMCTS35B 3 1/2" SQ TECH POT BLACK-17" 1375/CASE	1375	15	64.8741	CS	973.11
NET0303420LL-B COOLNET FOGGER WITH LOW PRESSURE LPD (PURPLE PIN) This item will ship from Sumner, WA	1	25	5.1502	EA	128.76

ORDER NO. 714-894-0581

PAGE 2 OF 2

BILL TO

115727
MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

SHIP TO

MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

QUOTE DATE 09/18/14	EXPIRE DATE 10/18/14	SALES REP 11 /	WRITTEN BY KATHY VUKAN	PAYMENT TERMS O.A.C. NET 30 DAYS
CONTACT BRYAN TASSEY		PHONE 209-384-6301	EMAIL	SHIP VIA LEAST EXPENSIVE WAY

PRODUCT / DESCRIPTION	PACK COUNT	QUANTITY	PRICE	U/M	EXTENSION
-----------------------	------------	----------	-------	-----	-----------

JMCDEL40 40 DOLLAR JMC STANDARD DELIVER CHARGE	1	1	40.0000	EA	40.00
--	---	---	---------	----	-------

MERCHANDISE TOTAL	HANDLING	MISC CHARGE	TAX	EST. FREIGHT	QUOTE TOTAL
3,073.61	0.00	0.00	242.68	0.00	3,316.29

Shopping Cart

The following Radio Flyer product(s) have been added to your shopping cart:

	Product Name	Unit Price	Qty	Subtotal
	CLASSIC RED WAGON	\$99.99	<input type="text" value="25"/>	\$2,499.75
Continue Shopping		Update Shopping Cart		

Please consider the following when selecting a shipping address: most Radio Flyer products arrive in their original packaging (not a brown box)

PROMOTION CODE (Limit One)

Please enter your promotion code if you have one.

[Apply Promotion](#)

GIFT CARD

Please enter your gift card code if you have one.

[Add Gift Card](#)

Estimate Shipping and Tax

Enter your destination to get a shipping

Subtotal **\$2,499.75**
 Shipping & Handling (United Parcel Service - UPS Ground) **\$492.75**
 Tax **\$181.23**
Total \$3,173.73

[View Return Policy](#)
[Proceed to Checkout](#)

[Home](#) | [Shopping Cart](#) | [Q](#)

[Climbing](#) | [Rigging](#) | [Rope](#) | [Pruning](#) | [Safety & Clothing](#) | [Tools](#) | [Plant Health](#) | [More](#) | [New Products](#)

Shopping Cart
[Continue Shopping](#)
Cart:

☒ Shop Online
 ☐ Pick Up at Store

PRODUCT	AVAILABILITY	QTY	EACH	TOTAL
Full Wrap-Around Pro Chaps 36" SKU: JE9138 Change Attributes Remove	In Stock	<input type="text" value="6"/>	\$69.33	\$415.98
ProVest™ II Chainsaw Protection Vest Large SKU: JE70L Change Attributes Remove	Back Order Available	<input type="text" value="6"/>	\$60.79	\$364.74
ProGloves™ II Chainsaw Protection Gloves Large SKU: JEGLV50L Change Attributes Remove	In Stock	<input type="text" value="10"/>	\$26.63	\$266.30
P120 8" Ergo Pruner SKU: P120 Remove	Back Order Available	<input type="text" value="30"/>	\$35.40	\$1,062.00
Leyco Happy Line Bypass & Fine Nose Pruners Combo Pack Blue SKU: 46352150 Change Attributes Remove	Back Order Available	<input type="text" value="30"/>	\$25.59	\$779.70

Promotional code: [Apply](#)

Order Subtotal: \$2,908.72
 Discount: \$0.00
Order Total: \$2,908.72

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 2 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Equipment replacement and Digital Camera

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative: The Toro Dingo is a vital part of my program. I use the piece of equipment every day and students learn hands on with different implements. This item is now 4 years old and in need of new engine and tracks. Our mechanic has looked at the motor and called Toro direct and the best solution would be to replace the motor and keep the old one for parts. The new tracks are for replacements. The current tracks are close to being worn out and visual chips and cracks are present.

The digital camera set up is for taking pictures to enhance lectures and social media. Many hours have been spent developing curriculum and one of the most challenging aspects is finding free, good quality images. The suggested macro lens will allow me to take up close pictures of insects and flower parts. This is vital not only for classroom instruction but also social media. People are engaged by photos, not text and as I develop the our social media strategies this camera will be able to take the Agriculture Department to the next level.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒
(Place an X next to the correct response)
If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

N/A

ect 1

		Double Click Worksheet to enter data Data can only be placed in the blue cells. (Rounded off to the nearest whole dollar)
--	--	---

[illegible]

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

CAL-LINE EQUIPMENT INC.

of SACRAMENTO
1430 Auburn Blvd
Sacramento, CA 95815

Estimate

Date	Estimate #
10/22/2013	690

Name / Address
Merced College Hort. Dept attn: Bryan Tassey 3600 M Street Merced CA 953488

Ship To

P.O. No.	Terms	Rep	Project
	Prepaid	SP	

Item	Description	Qty	Cost	Total
	Estimate for replacement parts for TX420 22306-260000658			
PA-CH640-3019	CH640S Toro Dingo Replaces CH20S-64725. Plus Incoming Freight.	1	1,566.44	1,566.44T
98-9800	Track (Narrow)	2	415.99	831.98T
	Subtotal			2,398.42
Incoming Freight	Estimated Incoming Freight: (For engine).	1	100.00	100.00T
Incoming Freight	Estimated Incoming Freight: (for Tracks).	1	60.00	60.00T
	I could have all items in less than a week. City of Merced - Merced County		8.00%	204.67

[www.bestbuy.com/site/olspage.jsp?id=pcat17005&type=page](#)

bestbuy

Expert Service. Unbeatable Price.

Weekly Ad

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Gift Cards

Gift Ideas

Order Status

Store Finder

PRODUCTS

SERVICES

DEALS

Search Best Buy

[Sign In](#)
[Create Account](#)

Your Cart

Your Location: 95340

Used to estimate arrival dates, s

Nikon - Cable

Model: MC-DC2

Weekly Ad

Thrusave best deals, all in one place.

Deal of the Day

A great deal, today only.

Best Buy Outlet

Clearance, pre-owned, refurbished and open box.

Hottest Deals

Great deals happening right now.

College Student Deals

Smart offers and coupons for students only.

Black Friday

The latest best, the lowest prices, no limits.

Cyber Monday

Our biggest deals in our biggest store.

Continue Shopping

70-200mm f2.8 L

Canon - Bundle EF 70-200mm f/2.8L USM Zoom Lens

Model: 2669A004-83609-101

Shipping \$17.95

Only Available for Shipping

Get it by:

Tue, Nov 11 - \$17.95

Standard

Fri, Nov 7 - \$37.95

Expedited

Thu, Nov 5 - \$82.95

Express

Sold & Shipped by:

CAMERA CAMERA

Not returnable to Best Buy Stores.

Marketplace

\$24.49

ON SALE

Reg. \$35.99

You Save: \$11.01

Remove

Canon - Speedlite Z70EX II External Flash

Model: 6247B002

Store Pickup FREE

Select a store

Shipping

Get it by:

Mon, Nov 10 - FREE

Standard

Tue, Nov 4 - \$11.99

Expedited (Order by 9:30 pm PT)

Mon, Nov 3 - \$19.99

Express (Order by 9:30 am PT)

\$139.99

ON SALE

Reg. \$169.99

You Save: \$30.00

Remove

www.bestbuy.com/site/canon/speedlite-z70ex-ii-external-flash/6247B002?ref=nav&id=

14

Canon - Macro Twin Lite
MT-24EX External Flash
Model: 2357A002

Shipping **FREE**

Only Available for Shipping

Get it by:

- ☒ **Mon, Nov 10 - FREE**
Standard
- ☐ **Tue, Nov 4 - \$11.99**
Expedited (Order by 3:30 pm PT)
- ☐ **Mon, Nov 3 - \$19.99**
Express (Order by 3:30 pm PT)
- ☐ **Sat, Nov 1 - \$27.49**
Saturday (Order by 3:30 pm PT)
Residential addresses only

\$769.99

ON SALE

Reg. \$829.99

You Save: **\$60.00**

Remove

Canon - Bundle EF 100mm
f/2.8 L IS Macro USM Lens
Model: 3554B002-83392-Klt

Shipping **\$15.95**

Only Available for Shipping

Get it by:

- ☒ **Tue, Nov 11 - \$15.95**
Standard
- ☐ **Fri, Nov 7 - \$34.95**
Expedited
- ☐ **Thu, Nov 6 - \$59.95**
Express

Sold & Shipped by:
CAMERA CAMERA

Not returnable to Best Buy Stores.

Marketplace
\$974.95

Remove

Canon - EOS 7D Mark II DSLR
Camera (Body Only) - Black
Model: 9128B002

☒ **Store Pickup **FREE****

[Select a store](#)

☐ **Shipping**

Get it by:

- ☐ **Tue, Nov 4 - FREE**
Express

\$1,799.99

Remove

Estimates calculated for 95340

Product Total \$5,184.36

Shipping \$33.90

Estimated Sales Tax \$203.25

Estimated Order Total \$5,421.51

Checkout

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 3 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Trade Show Professional Development/ Field Trips

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

This proposal is to attend the Far West Horticultural Trade Show in Portland Oregon. I have never attended and this would serve as not only professional development but allow me to keep up on trends and find new vendors for my program. There are also a few close by areas to visit such as the World Forestry museum and Portland Botanical Gardens which is why a rental car is being requested. This would be for a three day trip for two nights and only one day of instruction would be missed. Opportunities like this are vital to the health and growth of my program. Seeing tradeshow and gardens first hand allow me to communicate to my students what is out there in the industry rather than show them via websites.

The additional \$1,000 is for field trips throughout the year for instruction.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐

(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒

(Place an X next to the correct response)

If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

Project 1		<p>Double Click Worksheet to enter data</p> <p>Data can only be placed in the blue cells.</p> <p>(Rounded off to the nearest whole dollar)</p>
-----------	--	--

[illegible]

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

Flight: 1 roundtrip ticket

Traveling to Portland

Thu 27-Aug-15

Sacramento (SMF)	to Portland (PDX)	479 mi (771 km)
Depart 9:40 am	Arrive 11:24 am	Duration: 1hr 44mn	Flight: 2526
Terminal B			Operated by: HORIZON AIR AS ALASKA AIRLINES

Economy/Coach Class , DE HAVILLAND DHC-8 DASH 8-400 DASH 8Q

Total distance: 479 mi (771 km) Total duration: 1hr 44mn

Traveling to Sacramento

Sat 29-Aug-15

Portland (PDX)	to Sacramento (SMF)	479 mi (771 km)
Depart 10:40 am	Arrive 12:23 pm	Duration: 1hr 43mn	Flight: 2541
Terminal B			Operated by: HORIZON AIR AS ALASKA AIRLINES

Economy/Coach Class , DE HAVILLAND DHC-8 DASH 8-400 DASH 8Q

Total distance: 479 mi (771 km) Total duration: 1hr 43mn

[Choose a different flight for this package.](#)

Hotel: 1 room for 2 nights

Crowne Plaza Portland Downtown Convention Center

☆☆☆½ Portland, OR

Located in the heart of Portland, this family-friendly hotel is within walking distance of Oregon State Hospital Portland and Memorial Coliseum.

[More lodging info](#)

Check-in: Thu 27-Aug-15 Check-out: Sat 29-Aug-15

Room options		Price
☒	Room, 1 King Bed, Non Smoking - Advance Purchase Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	Included
☐	Room, 2 Queen Beds, Non Smoking - Advance Purchase Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	+ \$5.16 per night
☐	Executive Room, 1 King Bed with Sofabed, Non Smoking Includes: Free High-Speed Internet, Free Airport Shuttle	+ \$19.65 per night
☐	Room, 1 King Bed, Non Smoking	+ \$29.85 per night
☐	Room, 2 Queen Beds, Non Smoking Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	+ \$35.59 per night
More rooms/units... Choose a different hotel for this package.		

Car: 2-day rental

Standard Car

Hertz

- Air conditioning, automatic transmission, unlimited mileage.
- Nissan Altima or similar, 5 adults, 3 small carry-ons, 2 - 4 doors.

[Need a different car?](#)

Pick-up:
Thu 27-Aug-15 11:00 AM

Drop-off:
Sat 29-Aug-15 10:00 AM

Location: , Portland, OR (PDX)

Car class		Price
☐	No Car Selected	- \$53.97 per day
☒	Standard Car	Included

[Choose a different car class or vendor for this package.](#)

Register Today!

Find it All at
The Farwest Trade Show!

The largest green industry trade
show in the West!

Gain valuable new ideas, new
energy, source new products and
new innovations for your business!

Register Today!

Register today for the 2014 Farwest Trade Show
Discount pricing only available through July 31!

EXPO ONLY

3-Day Expo Only Pass

Regular Pass

OAN Members and Exhibitors Discount Pass
Special \$5 Discount Pricing for Exhibitors and
OAN Members

	Early-Bird through July 31	After July 31 and onsite
--	-------------------------------	-----------------------------

\$10

\$15

\$5

\$5

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2014-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 4_____ (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Work Study Student

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

A work study student is crucial to the success of the Horticulture program. Plants don't sleep or water themselves and must need constant care in order for students in class to have a positive learning environment. This position would employ a student for fall and spring semesters to work at the Horticulture Unit. This would be a great resume builder and the best way to gain additional skills and responsibility.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☒ No ☐
(Place an X next to the correct response)
If yes, then for how many years? 3_____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

N/A

		Instructional Aid Range 4 @ 9.37 hr x 10% workers comp	1	\$11,131	\$11,131.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$11,131.00
3	3000	Employee Benefits Contact Payroll for this information			\$0.00
4	4000	Supplies (Consumables) Attach a list of supplies needed			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Supplies			\$0.00
5	5000	Other Operating Exp. (Attach a list of all Conference & Travel, Equipment Repairs, and Contract Services to funded)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Other Operating Exp			\$0.00
6	6000	Capital Outlay (List each piece of Equipment and the cost below. Also attach a quote for each piece of equipment.)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Capital Outlay			\$0.00
		Total Project Expenditures			\$11,131.00

Appendix I – “Student Data Sheets”

Merced College does not have “Student Data Sheets”; however, below is the data for my program.

Landscape Horticulture Majors (14-15)	Duplicate		Unique	
	N	%	N	%
African-American	3	4.55%	3	5.77%
American Indian/Alaskan Native	0	0.00%	0	0.00%
Asian	5	7.58%	3	5.77%
Filipino	2	3.03%	1	1.92%
Hispanic	31	46.97%	25	48.08%
Multi-ethnic	0	0.00%	0	0.00%
Pacific Islander	0	0.00%	0	0.00%
Unknown	0	0.00%	0	0.00%
White, Non-Hispanic	25	37.88%	20	38.46%
≤19	8	12.12%	7	13.46%
20-24	25	37.88%	21	40.38%
25-29	7	10.61%	5	9.62%
30-34	7	10.61%	5	9.62%
35-39	5	7.58%	4	7.69%
40-49	7	10.61%	5	9.62%
50≤	7	10.61%	5	9.62%
Unknown	0	0.00%	0	0.00%
Female	22	33.33%	18	34.62%
Male	44	66.67%	34	65.38%
Unknown	0	0.00%	0	0.00%
TOTAL	66	100.00%	52	100.00%

Majors (2014-15)	N
Landscape Horticulture (AA)	39
Landscape Horticulture (AS)	19
Landscape Horticulture (CT)	8
TOTAL	66

Strategic Planning Goals:

1. Assure student access and success.
2. Partner with the community.
3. Promote a Sustainable, Supportive, and Safe Learning Environment.

ISLOs:

1. Global and Community Consciousness and Responsibility
2. Personal Development and Life-Long Learning

Gradebook via web Advisor through www.mddc.edu

WebAdvisor for Students

WebAdvisor for Faculty

WebAdvisor for Employees

Gradebook Select Section

Section Name and Title	Term	Start Date	Meeting Information	Location
LAND-14-1005 (1005) Landscape Construction	Spring 2015	01/12/15	01/12/2015-05/22/2015 Lecture Lecture Monday, Wednesday 10:30AM - 12:45PM, Plant Science Building, Room 1 01/12/2015-05/22/2015 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-50-1805 (1805) Residential Gardening	Spring 2015	01/12/15	01/12/2015-05/18/2015 Lecture Lecture Monday 02:00PM - 04:50PM, Plant Science Building, Room 1	Merced Campus
PLSC-10-1105 (1105) Elements of Plant Science	Spring 2015	01/12/15	01/12/2015-05/22/2015 Lecture Lecture Tuesday, Thursday 02:00PM - 04:15PM, Plant Science Building, Room 1 01/12/2015-05/22/2015 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
PLSC-10-1375 (1375) Elements of Plant Science	Spring 2015	01/12/15	01/12/2015-05/22/2015 Lecture Lecture Tuesday, Thursday 10:30AM - 12:45PM, Plant Science Building, Room 1 01/12/2015-05/22/2015 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-11-1883 (1883) Elements of Landscape Horticult	Fall 2014	08/11/14	08/11/2014-12/12/2014 Lecture Lecture Monday, Wednesday 10:30AM - 12:45PM, Plant Science Building, Room 1 08/11/2014-12/12/2014 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-12-1228 (1228) Landscape Design	Fall 2014	08/11/14	08/11/2014-12/12/2014 Lecture Lecture Tuesday 02:00PM - 03:50PM, Plant Science Building, Room 1 08/11/2014-12/12/2014 Laboratory 1 (2:3) Laboratory Thursday 02:00PM - 04:50PM, Plant Science Building, Room 1 08/11/2014-12/12/2014 Lab1-Overload-Split (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-16-1755 (1755) Plant Propagation	Fall 2014	08/11/14	08/11/2014-12/12/2014 Lecture Lecture Monday 02:00PM - 03:50PM, Plant Science Building, Room 1 08/11/2014-12/12/2014 Laboratory 1 (2:3) Laboratory Wednesday 02:00PM - 04:50PM, Plant Science Building, Room 1	Merced Campus
PLSC-10-1227 (1227) Elements of Plant Science	Fall 2014	08/11/14	08/11/2014-12/12/2014 Lecture Lecture Tuesday, Thursday 10:30AM - 12:45PM, Plant Science Building, Room 1 08/11/2014-12/12/2014 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-10B-1805 (1805) Plant ID & Usage: Spring	Spring 2014	01/13/14	01/13/2014-05/23/2014 Lecture Lecture Monday 02:00PM - 04:50PM, Plant Science Building, Room 1 01/13/2014-05/23/2014 Laboratory 1 (2:3) Laboratory Wednesday 02:00PM - 03:50PM, Plant Science Building, Room 1	Merced Campus
LAND-17-1005 (1005) Nursery & Garden Center Pract	Spring 2014	01/13/14	01/13/2014-05/23/2014 Lecture Lecture Monday, Wednesday 10:30AM - 12:45PM, Plant Science Building, Room 1 01/13/2014-05/23/2014 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
PLSC-10-1105 (1105) Elements of Plant Science	Spring 2014	01/13/14	01/13/2014-05/23/2014 Lecture Lecture Tuesday 02:00PM - 03:50PM, Plant Science Building, Room 1 01/13/2014-05/23/2014 Laboratory 1 (2:3) Laboratory Thursday 02:00PM - 04:50PM, Plant Science Building, Room 1	Merced Campus
PLSC-10-1375 (1375) Elements of Plant Science	Spring 2014	01/13/14	01/13/2014-05/23/2014 Lecture Lecture Tuesday, Thursday 10:30AM - 12:45PM, Plant Science Building, Room 1 01/13/2014-05/23/2014 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
PLSC-10-6105 (6105) Elements of Plant Science	Spring 2014	01/13/14	01/13/2014-05/23/2014 Lecture Lecture Monday 05:10PM - 10:00PM, Plant Science Building, Room 1 01/13/2014-05/23/2014 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-10A-1755 (1755) Plant ID & Usage: Fall	Fall 2013	08/12/13	08/12/2013-12/12/2013 Lecture Lecture Wednesday 02:00PM - 03:50PM, Plant Science Building, Room 1 08/12/2013-12/12/2013 Laboratory 1 (2:3) Laboratory Monday 02:00PM - 04:50PM, Plant Science Building, Room 1	Merced Campus
LAND-11-1183 (1183) Elements of Landscape Horticult	Fall 2013	08/12/13	08/12/2013-12/12/2013 Lecture Lecture Monday, Wednesday 10:30AM - 12:45PM, Plant Science Building, Room 1 08/12/2013-12/12/2013 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus
LAND-15-1228 (1228) Landscape Maintenance	Fall 2013	08/12/13	08/12/2013-12/12/2013 Lecture Lecture Tuesday 02:00PM - 03:50PM, Plant Science Building, Room 1 08/12/2013-12/12/2013 Laboratory 1 (2:3) Laboratory Thursday 02:00PM - 04:50PM, Plant Science Building, Room 1	Merced Campus
PLSC-10-1227 (1227) Elements of Plant Science	Fall 2013	08/12/13	08/12/2013-12/12/2013 Lecture Lecture Tuesday, Thursday 10:30AM - 12:45PM, Plant Science Building, Room 1 08/12/2013-12/12/2013 Laboratory 1 (2:3) Laboratory Days to be Announced, Times to be Announced, Room to be Announced	Merced Campus

OR: Select a term or date range to change your class list

OR: Select a term or date range to change your class list

[<--Back to Gradebook Menu](#)

Setup Steps	Setup Action	Required	Settings Found
Step 1: Grade Calculation			
-	Set Overall Calculation Method	Completed	Y
-	Define Grading Scale		Y
Step 2: Assignment Categories			
-	Define Assignment Categories	Completed	Y
-	Set Category Minimum Requirements		
Step 3: Assignments			
-	Build Groups of Assignments		Y
-	Update the Assignments		Y
Step 4: Accessibility			
-	Set Gradebook Copy Access		
Step 5: Report and Display Options			
-	Set Display Options	Completed	Y
-	Set Institutional Reporting Codes		

PLSC 10

Sequence	Click on an assignment to enter scores	Category	Possible Points
	Break on Time	Quizes	10.00
	Codit	Quizes	10.00
	Container Quiz	Quizes	17.00
	Fertilizer Look Up	Quizes	10.00
	Food Label	Quizes	10.00
	Greenhouse Adventure	Quizes	10.00
	Irrigation Quiz	Quizes	10.00
	Leaf Quiz	Quizes	10.00
	Library Tour	Quizes	10.00
	Nutrition Crossword	Quizes	10.00
	Percent of Income Food	Quizes	10.00
	Plant Id Quiz	Quizes	8.00
	Plant Sale Set Up	Quizes	10.00
	Shakey Corn	Quizes	10.00
	Soils	Quizes	20.00
	Terminator Gene	Quizes	10.00
	Text Book Handout - Veggie Prod	Quizes	10.00
	Tissue Culture - Aloe	Quizes	10.00
	Turgor Pressure Extra Credit	Quizes	0.01
	Plant Collection	Plant Collection	100.00
	Articles 1-10	Articles	100.00
	Articles 6-10	Articles	50.00
	Final	Final	100.00
	Lab Participation	Lab Participation	100.00
	Journal	Journal	100.00

LAND 11

Sequence	Click on an assignment to enter scores	Category	Possible Points
	Careers Video	Id Quiz	10.00
	Container Quiz	Id Quiz	17.00
	Dura Bench, Greenhouse Etc	Id Quiz	20.00
	Extra Credit	Id Quiz	0.01
	Fert Quiz	Id Quiz	10.00
	Garden Shed Day	Id Quiz	15.00
	Greenhouse Adventure	Id Quiz	10.00
	Insects	Id Quiz	10.00
	Irrigation Quiz	Id Quiz	10.00
	Leaf Quiz	Id Quiz	10.00
	Leaf and Flower Id	Id Quiz	30.00
	Library Tour	Id Quiz	10.00
	Nursery Visit	Id Quiz	10.00
	Plant Id	Id Quiz	8.00
	Prop 37	Id Quiz	10.00
	Soil Texture	Id Quiz	10.00
	Succulent Motherstock	Id Quiz	10.00
	Suuculent Mother Stock II	Id Quiz	10.00
	Tree Planting Quiz	Id Quiz	10.00
	Journal	Journal	100.00
	Lab Effort	Lab Effort	100.00
	Digital Portfolio	Digital Portfolio	100.00
	Research Paper	Research Paper	100.00
	Final	Final	100.00

LAND 12

Click on an assignment to enter scores	Category	Possible Points
Irrigation Design	Irrigation Design W/ Specs	100.00
Landscape Design	Landscape Design W/Plant Key	100.00
Landscape Proposal	Landscape Proposal (oral)	100.00
Aggie Park	Quizes	10.00
House Design	Quizes	30.00
Irrigation Turf First Try	Quizes	10.00
Library Hardscape	Quizes	10.00
Plan Reading	Quizes	30.00
Rainbird Irrigation Worksheet	Quizes	40.00
Scale - Floor, Foundation, Wall, Pl	Quizes	10.00
Scale Handout	Quizes	10.00
Sectional Ffa	Quizes	0.01
Simple Square	Quizes	10.00
Theater Irrigation	Quizes	10.00
Tree Nursery Layout	Quizes	10.00
Lab Work/Attendance	Lab Work Attendance	100.00
Journal	Journal	100.00

LAND 14

Sequence	Click on an assignment to enter scores	Category	Possible Points
	Lab Tools Gloves & Glasses Check	Quizes	10.00
	Library Tree	Quizes	10.00
	Saftey Quiz	Quizes	10.00
	Saftey Test	Quizes	20.00
	Extra Credit	Lab Excercises and Skills Test	0.01
	Finish Form Work	Lab Excercises and Skills Test	20.00
	Form Setting	Lab Excercises and Skills Test	30.00
	Lab Participation	Lab Excercises and Skills Test	100.00
	Redhead/4x4 Set	Lab Excercises and Skills Test	20.00
	Viberplate	Lab Excercises and Skills Test	10.00
	Wood Succulent Planter	Lab Excercises and Skills Test	20.00
	Big Creek Assignment	Written Assignments	10.00
	Class Average Low and High Out	Lab Pract Final Wood Project	100.00
	Instructor Score	Lab Pract Final Wood Project	140.00
	Final	Final	200.00

LAND 15

Sequence	Click on an assignment to enter scores	Category	Possible Points
	County Library Write Up	Quiz	50.00
	Drafting 3 Projects	Quiz	30.00
	Herbicide Ppe Roundup Pro Max	Quiz	10.00
	Herbicide Selection	Quiz	20.00
	Irrigation Controller & Troubleshoot	Quiz	30.00
	Lab Tools Gloves, Glasses & Prunes	Quiz	30.00
	Mulch Veggie Garden & Stuff	Quiz	0.01
	Pruner Sharpening Lab	Quiz	10.00
	Safety Test	Quiz	10.00
	Tool Id	Quiz	30.00
	Tree Pruning	Quiz	60.00
	Weed Id	Quiz	10.00
	Weed Quiz	Quiz	10.00
	Lab Participation	Lab Participation	100.00
	Final	Final	100.00
	Co Portfolio	Co Portfolio	100.00
	Journal	Journal	100.00

LAND 16

Click on an assignment to enter scores	Category	Possible Points
Air Layering Idea	Quizes	0.01
Damping Off	Quizes	5.00
Extra Credit	Quizes	0.01
Fruit Tree Quiz	Quizes	10.00
Germination Graph	Quizes	10.00
House Plant Prop	Quizes	20.00
Iris Lab	Quizes	10.00
Layering Gizmo	Quizes	20.00
Library Tour	Quizes	10.00
Soil Cost Breakdown	Quizes	10.00
Succulents Part Two	Quizes	10.00
Transplanting Seeds and Cuttings	Quizes	10.00
Propagation Project	Project	100.00
Journal	Journal	100.00
Final	Final	100.00
Lab Participation	Lab Participation	100.00

LAND 17

Sequence	Click on an assignment to enter scores	Category	Possible Points
	4-8 Book	Quizes	20.00
	Bench Design	Quizes	10.00
	Container Quiz	Quizes	24.00
	Fruit Tree Final	Quizes	30.00
	Lowes Osh Visit	Quizes	10.00
	Nursery Cart Look Up	Quizes	10.00
	Nursery Container Production Volume	Quizes	50.00
	Production Cost	Quizes	75.00
	Raley's	Quizes	10.00
	Sale Clean Up in Class (monday)	Quizes	10.00
	Supplies Cost	Quizes	10.00
	The Greenery	Quizes	10.00
	Retail Display	Retail Display	100.00
	Articles 1-10	Articles	100.00
	Articles 6-10	Articles	50.00
	Final	Final Plant Sale	100.00
	Lab Participation	Lab Participation	100.00
	Journal	Journal	100.00

LAND 50

Lecture only

Sequence	Click on an assignment to enter scores	Category	Possible Points
	Journal	Journal	100.00
	Group Project	Group Project	100.00
	Final	Final	100.00

Recruitment program

In my first year teaching full time I visited every high school program in my section that taught a Horticulture class or in one form or another worked with plants. I wanted to see firsthand what programs were doing and the state of their facilities. I soon realized that there were very few programs that were doing anything at all from a nursery standpoint. Numbers of students were down across the board. I even went in to a greenhouse in the middle of February, which should be prime time growing for a spring plant sale, and there was not a single plant in there and the heater was running full blast.

After seeing all of this first hand I quickly decided to develop horticultural survival kits. These kits included two cubic yards of soil, rooting hormone, flats, containers, and plants. Everything that you would need to start a program. My goal with this was to see a need and fill it. Why this is not a traditional method of recruitment I found it to be more than that. I was not trying to recruit students, I was trying to create excitement and help high school programs develop their own student base.

After a few years I started the process of updating my articulation agreements and developing curriculum to share with high school teachers. My primary recruitment now is visiting high schools to give a talk on college in general and compare community college to universities from a cost perspective. I also talk about scholarships and articulation agreements. See handout.

Unloading soil and supplies at Merced High

Talking with Vikki Davis at Golden Valley

What Does It Cost to Go to Merced College?

Before we start, you need to know what a **UNIT** of credit is. Everybody talks about units:

- "I have 20 units this semester and am swamped."
- "I need 12 units to be a full-time student."
- "I'm only taking 6 units and working full-time."

A unit is measured differently for lecture time and lab time. One unit of lecture is equal to one hour of instruction per week, therefore, a 3 unit Ag. Business class meets 3 hours per week which might be Monday, Wednesday and Friday from 8:00 to 8:50

One unit of lab is equal to 3 hours of instruction per week if required. Ag. Welding has a 1 unit lab which means it meets 3 hours per week which is done on Thursday nights.

Example: Ag. Welding is a **3 unit** class that meets one night per week with 2 units of lecture (2 Hours) and 1 unit of lab (3 hours) for a total of 5 hours of class time.

Now, how much are fees to enroll?

California State Enrollment Fee	46.00 per unit
Health Fee	17.00 per semester
Parking Permit	20.00 per car
Associated Student Body Fee (optional)	10.00 per semester
Books and Supplies	varies per semester and by class requirement

The bottom line for the Merced College semester example above:

Enrollment Fee (\$46.00 per unit for 12 units)	552.00
Health Fee	17.00
Student Body Fee	\$11.00
Parking Permit	20.00
Books (estimate depending upon class load)	<u>300.00</u>
Total for Semester	913.00

Estimated cost for comparable semester at Fresno State (2012-2013):

Enrollment Fee (6.1 Units +)	3,317.50
Parking Permit	93.00
Books (estimate depending upon class load)	<u>600.00</u>
College Total	\$4,010.50

Fuel (140 miles (Merced) @ 15 MPG x \$3.00 / gal)	<u>2240.00</u>
Commuter Total	\$6250.50

-OR-

Residence Hall Expenses	<u>4500.00</u> (estimate)
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Jim Andersen
Dean, Career Technical
Education

Agriculture Division Faculty

Steve Bell
Soil & Crop Science

Kim Donaher
Agriculture Business

Paul Dunn
Mechanized Agriculture &
Diesel Equipment Technology

Jaime Farao
Animal Science

Darol Fishman
Mechanized Agriculture &
Diesel Equipment Technology

Bryan Tassey
Horticulture

Adjunct Faculty

Dr. Bill Weir
Plant Science

Scott Stoddard
Plant Science

Tim Donovan
Mechanized Agriculture

MERCED COLLEGE
Agriculture Advisory Committee
October 13, 2014
6:00 p.m.

Welcome and Introductions

~ **Dinner** ~

Presentation – Dr. Bill Weir

Dean's Report Jim Andersen

Botanical Garden Bryan Tassey
Facility Master Plan Update

Farm Update Steve Bell

AggieFest 2014 Update Kim Donaher

Student Achievements & Accolades
Darol Fishman
Jaime Farao

Subject Matter Area meetings to follow

Adjournment

Merced College Advisory Committee
October 13th, 2014

The meeting was called to order by Darol Fishman at 6:14 PM

Members present:

Steve Mua	Tim Donovan	Bill Weir
Bill Crivelli	Steve Obad	Doug Thiel
Ken Williams	Jean Obad	Jim Williamson
Bryan Tassey	Steve Bell	Jim Cunningham
Don Emerick	Kim Donaher	Katie Dumford
Darol Fishman	Matthew Terra	Denise Skidmore
Dino Migliazzo	Alpha Gipe	Elaine Valladao

Dinner was served and the business meeting began at 6:50 PM

Special Presentation – Darol Fishman

Bill Weir was presented with a Resolution from the Merced College Academic Senate recognizing 20 years of academic and professional service to the students of Merced College. The members of the Agriculture Division also presented him with a card and gift certificate for him and his wife Carol. Thank you Dr. Weir for all you have done for Merced College and the field of Agriculture.

Dean's Report – Jim Andersen

- Dean Jim Andersen presented the CTE Program Completer Data complimenting the many CTE programs for the great work they have done in increasing the number of completers in both certificates and degrees.
- He pointed out the increases in numbers with the 3 programs that had been a part of the TAACCCT Grant which include Mechanized Agriculture, Welding and Industrial Electronics.
- Dean Andersen also provided information to the committee dealing with the importance of an embedded CTE Counselor as well as a CTE Job Placement Coordinator and the affects both of these had on the students involved in the TAACCCT Grant. He noted that he has been working with the powers that be to try and find the resources to sustain these two critical components of the 8 Guiding Principles of the grant.
- Also presented was information regarding Transfer Model Curriculum and that the Agriculture sector was the only one in the state that had been able to secure three TMC's specific to subject matter areas: Plant Science, Ag. Business and Animal Science.

Faculty and Program Reports

Botanical Garden Master Plan Update – Bryan Tassey

- Bryan presented a campus master plan map of the location of the proposed botanical garden which is closer to fruition that it was 7 years ago when the process started. Merced College has had a complete change of administration which is now 100% behind the project and very active in its planning. The Tree Partners and Jim Williamson were critical in getting it off the ground by providing the seed money for the architectural rendition of the project.
- Jim Williamson made a motion to have the committee approve the addendum to the Facilities Master Plan to include the 10 acre Botanical Garden as presented on 10/13/14 by Bryan Tassey. Steve Obad seconded the motion. Discussion ensued: Dino Migliazzo questioned who would facilitate and fund the ongoing expenses. Bryan explained the involvement with both manpower and finances from The Tree Partners, Cal Fire and Mercy Gardens. To date, two grants of 1.5 million dollars have been applied for through

Cal Fire and The Tree Partners have agreed to \$75,000 in donation to make this thing happen. The project could also include the Merced County Master Gardeners. The motion passed by unanimous voice vote.

Farm Update – Steve Bell

- Steve reported the Pumpkin Sale was coming up and this weekend would be the first of three to take place. It's done more as a public outreach activity to get the community out to see and experience the Merced College Farm. He has had elementary schools take a field trip so their students could partake. Steve has formed a Pumpkin Sale Committee to get students more involved and to manage the sale.
- He gave a report on the crop rotations and contractual agreements. Due to the lack of water and the agreement with Azteca, no corn was planted. Winter forage will be planted in its place and hay will be harvested from that crop. He also mentioned that the squirrels had decimated the almonds so yield was way down from years past.
- He is working with Helena Chemical to set up some plots to be used for experimental crop practices.
- The Farm has a new Caterpillar crawler to be used for ripping. He is in the process of securing a Wilcox ripper to go behind the new machine.

AggieFest – Kim Donaher

- Kim presented and handed out information regarding AggieFest and how important the support of the community was needed to make it happen. She also cited those events it helped to fund including CAL leadership activities, sending students to the PLANET Student Career Days, and scholarships

Student Achievements and Accolades

- Darol Fishman reported on the results for the 2014 PLANET Student Career Days for the eight Merced College students who participated.
- Jaime Farao reported on the results of the three students who participated in the Dairy Judging contest at the World Dairy Expo in Madison, Wisconsin.
- Jaime also presented a slide show showcasing the results of the Merced Livestock Show Team in the intercollegiate division at the Big Fresno Fair.

Subject Matter Area Meetings

Each instructor adjourned to meet with their respective committees.

The General Meeting was adjourned by Darol Fishman at 8:05 PM

Respectfully submitted,

Darol Fishman

MERCED COLLEGE
Agriculture Division Fall 2014 Meeting #1
August 8, 2014

MINUTES

Present: Jim Andersen (Dean, Area 3)
Steve Bell, Kim Donaher, Paul Dunn, Jaime Farao, Darol Fishman, Bryan Tassey, Karen Wallace

Absent:

Fall 2014 Division Meetings

The faculty discussed the best time for Division meetings for the Fall semester. It was decided to schedule meetings once per month on Fridays at 12 noon – with the next meeting **Friday, August 15th**. The staff will meet more frequently if needed as planning for AggieFest begins.

2014-15 Division Activities

Darol Fishman distributed the list of activities for 2014-15. These events will be discussed further at the next meeting.

Items for August 15th Agenda

- COLC Event Planning & Facilities
 - Horse Boarding – Spring Semester
 - AggieFest 2014
-

The Merced College Agriculture Department Instructional Farm Facility is established for the purpose of enhancing instruction in agriculture; including crop production, livestock production, landscape horticulture production, equipment utilization, student projects, and applied research. The Farm is an extension of the classroom instructional program.

The Agriculture Advisory Committee representing the diversity of the local agricultural community is a standing vocational advisory committee composed of a broad representation of industry, high school and college representatives, chaired by the Area Dean. The college representatives serve as ex-officio members. The Agriculture Advisory Committee is made up of representatives from the five subject area advisory sub-committees: animal science, plant science, mechanized agriculture, agriculture business, landscape horticulture. The committee, consisting of 10 to 20 members, shall meet at least once a year and more frequently if deemed necessary by the Area Dean or Vice President of Instruction. Membership of the committee and subcommittees is initially approved by the President-Superintendent and reviewed annually. The subcommittees will develop instructional and budget recommendations for their areas and forward them to the Agriculture Advisory Committee for approval.

The Agriculture Department, in carrying out the Instructional Farm Plan, is administratively responsible to the Vice President of Instruction. The Vice President of Administrative Services shall establish such administrative and audit controls as necessary to provide complete financial data regarding the operation of the Farm. The Area Dean is designated as the administrator to have responsibility of the various Farm accounts and agreements established for operation of the Farm. The Agriculture Department Farm Coordinator is directly responsible to the Area Dean.

To facilitate the operation of the Instructional Farm Facility, the Board of Trustees, as defined in California Education Code Section 84030, has established the "Merced College Farm Fund," a special revenue fund, for the purposes as described under California Code of Regulations Section 58190 (and others). The Merced College Farm Fund is designated to account for the operations of the Agriculture Department Farm, which include purchasing supplies, materials, chemicals, fertilizers, seed and seed stock, livestock, repair items, fuel, and equipment to carry out the Farm Plan. Operations also involve the selling of produce, livestock, equipment, and other products of the Farm. All purchases and sales must follow standard District procedures (refer to operational procedures).

Revised 9/7/76
Revised 5/2/78
Revised 4/20/93
Revised 8/3/10

ADMINISTRATIVE PROCEDURE 4600

A. Staff and Advisory Committee

1. Instructors in the Department have primary responsibility for the Farm Plan and to the utilization of the Farm as it relates to their areas of instruction.
2. In development of the Plan, subject matter advisory committees give input regarding the total instructional area. This includes the practical application of classroom instruction to farming operations.
3. All of the subject matter area plans including instructional and budget components, are then combined into one operational Farm Plan ratified by the total Agriculture Advisory Committee.
4. After approval by the Agriculture Advisory Committee, the Plan including a budget is then presented for review so that it goes before the Board concurrently with the tentative overall District budget. Past year accounting will be available during the approval process.

B. Management Decisions

1. Day to day operational decisions will be made by the instructional staff and Farm Coordinator.
2. The overall management of the Farm is the responsibility of the Area Dean. Management decisions are communicated regularly to all Agriculture Department members.
3. The management is to follow the approved Farm Plan and budget unless there are instructional changes or changes based on weather or prices that dictate a change. Such changes will be approved by the Vice President of Instruction.

C. Fiscal Accountability

1. All supplies, materials, chemicals, fertilizer, seed and seed stock, livestock, repair items, fuel, and equipment, as needed, for the Farm will be purchased through the Farm account using regular approval procedures.
2. Purchases will be made using the District purchasing procedures. Purchases will originate from the staff of the Agriculture Department, be

approved by the Area Dean, recorded in Agriculture Department records by the Area Secretary and processed using standard District procedures.

3. Sales of all produce, livestock, and other products of the Farm may be through cooperatives, by contract or private treaty. Such payments shall be submitted to the Student Fees Office within 48 hours of the sale unless other contractual arrangements have been made. All checks, money orders, and drafts shall be made payable to "Merced College Farm." All payments that are submitted through the mail shall be addressed to the attention of the Business Office.
4. All assets acquired by the Farm are the property of the District. Any sale, trade, or disposal of such assets is to be handled by the District Purchasing/Contracting Office. Receipts from the sale of such assets are to be credited to the Farm account.
5. Agreements entered into with agricultural cooperatives, companies, or associations shall follow District procedures (for example, review by the Purchasing/Contracting Office) and copies will be maintained in the Area Dean's Office.
6. A prudent contingency shall be a component of the Farm budget. This contingency may be carried over from year to year. The amount of the contingency will be recommended by the Agriculture Advisory Committee within the budget submitted to the Board of Trustees.
7. Audit of the Farm accounts will follow existing District procedures.
8. A manual of procedures covering the operation of the Farm and the Farm Fund will be reviewed yearly.

Revised 8/3/10
4/20/93

**Merced College Agriculture FFA/CATA Activities
2014/2015**

August 11 Monday	Fall Semester Begins	
September 9 Tuesday	M/M SOLC/CATA Host: Merced College	4:00 – 7:00
September 29 Monday	Merced College Ag. Advisory Meeting Merced College Faculty Dining	6:00 – 9:00
October 1-3 Thursday/Friday	Collegiate Livestock Show Fresno Fairgrounds	TBA
October 9 Thursday	Farm to Food Day Merced County Fairgrounds Host: Merced County Farm Bureau	TBA
October 17-19 and 24-26 Friday/Saturday/Sunday	Merced College Pumpkin Sale Merced College Farm	TBA
October 15 Wednesday	Opening/Closing Contest & CATA Host: Gustine HS	4:00 – 7:00
October 24/25 Friday/Saturday	CAL Fall Leadership Conference Host: TBA	TBA
November 8 Saturday	AggieFest 2014 Merced County Fairgrounds	4:00 – 7:00
November 12 Wednesday	CATA Meeting w/dinner to follow Host: Pacheco HS	4:00 – 6:00
November 20 Thursday	Farm City Banquet Merced County Fairgrounds	TBA
November 21/ 22	Central Region Roadshow/CATA Meeting Host: Delta College	TBA
December 2 Tuesday	Project Comp Judging Golden Valley Buhach Colony	7:30 – 12:00 12:30 – 5:00
December 4 Thursday	Project Comp Judging Livingston Atwater	7:30 – 12:00 12:30 – 5:00
December 4-6	Midwinter Institute Host: Butte College & CSU Chico	TBA
December 8-12	Fall Semester Finals Week	
December 8 Monday	Project Comp Judging Pacheco/Los Banos Dos Palos	7:30 – 12:00 12:30 – 5:00
December 10 Wednesday	Project Comp Judging Gustine Hilmar	7:30 – 12:00 12:30 – 5:00
December 11 Thursday	Project Comp Judging Le Grand Merced	7:30 – 12:00 12:30 – 5:00

December 12 Friday	Project Comp Judging Mariposa	8:00 – TBD
December 12 Friday	Merced College Ag Christmas Party Host: TBA	TBA
January 12	Spring Semester Begins	
January 24 Saturday	M/M Section Super Saturday Host: Merced College	8:00 – 4:00
February 4 Wednesday	Project Competition Banquet Merced County Fairgrounds	6:00 – 10:00
February 28 Saturday	Central Region CATA Meeting Host: Cosumnes River College	TBA
March 6 Friday	CAL Spring Leadership Activity Host: TBA	TBA
March 13/14 Friday/Saturday	California Collegiate Livestock Show Porterville Fairgrounds	TBA
March 9 Monday	Sectional Parli-Pro Contest Host: Merced College	TBA
March 12-15	PLANET Student Career Days Host: Colorado State University	TBA
March 21 Saturday	Merced College FFA Field Day Sectional BIG Contest	all day
March 27 Friday	Central Region Parli-Pro Contests Host: Merced College	TBA
April 11 Saturday	Merced College Plant Sale Merced College Nursery	TBA
April 17 & 18 Friday/Saturday	Fresno State Field Day/State Finals Host: Fresno State	TBA
April 20 Monday	State FFA Conference Career Show Fresno Convention Center	TBA
April 23 Thursday	M/M Sectional Planning Meeting Host: Livingston High School	4:00 – 6:00
May 2 Saturday	FFA State Finals Cal Poly, SLO	TBA
May 14 Thursday	Merced College Aggie BBQ Lake Yosemite	6:00 – 10:00
May 18-21	Spring Semester Finals Week	

Professional Growth and Development Activities

- Presented at “Young Professionals Conference”
- Presented at San Joaquin Region Road Show
- Presented at Merced College Board of Trustees meeting
- Met with Tom Burchell of Burchell nNursery
- Member and presenter of California Dialog Exchange
- Visit Takoa Nursery – Fresno
- Visit Filoli Gardens
- Visit Ruth Bancroft Gardens
- Visit LE Cooke Nursery
- Attend CATA Conference in SLO
- Nursery tours of Santa Barbara County Nurseries
- Visit Berkeley Botanical Garden
- Hosted a public viewing of Symphony of the Soil
- Attend webinar for Cal Fire Grants
- Attended a seminar for Cal Fire Grants
- Wrote concept grant proposals for 3.2 million dollars for Merced College.
- Attend quarterly Tree Partners foundation Meetings
- Judge Project Competition for the section (two days)

CATA Membership

Proof of payment for CATA membership

<div><div>Bank of America </div><div>Online Banking</div></div> <div>Erin E Tassey Profile & Settings Sign Off</div> <div>Search </div>						
Accounts	Bill Pay	Transfers	Cash Back Deals	Tools & Investing	Open an Account	Help & Support
09/17/2014	CATA					\$140.00

Merced College - Perkins Title I-C (VTEA) Local Application

Please read the instruction very carefully and include all information requested.

Attached is the Local 2015-16 Perkins Title C-1 (VTEA) Application. The application process will be completed in two phases. The first phase of the application is attached and due by Friday, October 31st 2014. This phase concentrates on; Part I, the Program Improvement Cover Sheet, and Part II, the project proposal(s). Please save your applications with your program name as part of the file name and once completed, email it to the Dean of your Area. (due date 10-31-14) Your applications will be reviewed by the Dean of your Area, the Merced College VP's, and a VTEA Advisory Committee Review Process. At this point, those proposals approved for funding will complete the second phase of the application. The second phase is retrieving the core indicator and student success data. This will take place when the Chancellor's Office makes the Core Indicator information available (sometime in mid-January to mid-February).

You will note that the Cover Page (Part I) contains a hyperlink that will take you to the CuricUNET site where the IPR's are located. The answers to the questions on cover page come directly from Section III of your current Program Review.

The second page of the application, (Part II) is where you create the Project Proposal(s) The Project Proposal Narrative on that page comes directly from Section IV of your current Program Review. If you have multiple project proposals to address your Program Improvement Plan, they must be listed on separate Part II pages and must be listed in order of priority and numbered to reflect their priority ranking.

The Project Proposal Budget is the third page and when completed should reflect the total cost of the project as it is broken down into the various types of expenses (Salaries, services, supplies, and equipment). Again, each project proposal must have a separate budget page as well.

Before a project will be approved, all equipment, supplies, software, and travel requested must have a quote included with the application and be in an electronic format and pasted onto the blank pages at the end of the application. In addition, all additional information requested on the budget sheet (**written in red**) of the application must also be included with the application before a project will be approved.

Keep in mind that all resources requests must be supported by a current comprehensive review as well as a current annual program review in the years following the comprehensive review.

If you have any questions feel free to contact Jim Andersen at x6396.

Thanks,

Jim Andersen
Merced College
Dean of Instruction, Area 3
Agriculture - Industrial Technology - Life Fitness
Office (209) 384-6396
Email - andersen.j@mccd.edu

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds

PART I: Cover Page

Program Improvement Plan

As stated in Section III of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture **Program TOP Code:** 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

On the following two questions; first give details to the “Big Picture” as it relates to the overall program improvements needing to be addressed, and in question two, explain what steps are being taken to address these program needs. Each Program only needs to submit one Cover Page.

- A. Briefly describe program improvement issue(s) concerning this TOP code and include specific examples. (Limited to 2,000 characters, or approximately ½ page of text.)**

As the Horticulture program grows so must the nursery in order to provide a vital hands on learning laboratory for students to gain marketable skills. Support staff in the form of a works study student will be important in the implementation of the resources requested for this application. Students need to be exposed to current trends and equipment in the industry so they can hit the ground running in the career path of their choice. It's important to understand that plants are living breathing entities and require materials to help them grow and flourish. A tremendous amount of effort has been put in to find additional sources of funding from the community and industry to support this program. Industry and community partners include but are not limited to Tree Partners Foundation, RainBird Corp, Takao Nursery, Frantz Nursery, Big Creek Lumber, American Taki, Rotary International, Merced Garden Club, LeGrand Garden Club, and UC Master Gardeners. It's vital to stay current with industry both in equipment and supplies and professional development. This is the start of my 6th year teaching and funding has been requested to visit a tradeshow.

- B. Briefly describe how the issue(s) will be addressed. (Limited to 2,000 characters, or approximately ½ page of text.)**

The expansion of the nursery will be addressed with my priority #1. Containers, propagation supplies and soil are being requested. A request for a digital camera and travel would help develop new curriculum and provide enhancement of our social media platforms.

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 1 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Nursery Supplies for new greenhouse

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

In the Fall of 2014 a new greenhouse was installed and the materials requested are to support this facility for instructional purposes. Soil is listed and will serve a potting media. General nursery supplies, hoses, containers, pruners. Carts are listed to facilitate plant material being moved around the nursery and for customers at our plant sale. There are a few safety items that are needed from Bishop Co quote for the Landscape Maintenance class.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒
(Place an X next to the correct response)
If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.
N/A

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

McCONKEY
12321 WESTERN AVE
GARDEN GROVE, CA 92841
714-894-0581

Quotation

QUOTE #	203661
LOCATION	GARDEN GROVE
DATE	09/18/14
PAGE	1 OF 2

BILL TO

115727
MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

SHIP TO

MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

QUOTE DATE 09/18/14	EXPIRE DATE 10/18/14	SALES REP 11 /	WRITTEN BY KATHY VUKAN	PAYMENT TERMS O.A.C. NET 30 DAYS
CONTACT BRYAN TASSEY	PHONE 209-384-6301	EMAIL	SHIP VIA LEAST EXPENSIVE WAY	

PRODUCT / DESCRIPTION	PACK COUNT	QUANTITY	PRICE	U/M	EXTENSION
JMCD10LTC 10" COLOR BOWL LT. TERRA COTTA 100/CS	100	1	74.6685	CS	74.67
DRACSY34100 COLORSTORM YELLOW HOSE 3/4" 100' 17313	1	2	116.8100	EA	233.62
DRA750PLC LEMON HEAD WATER BREAKER ULTRA SOFT WITH LOWER FLOW	1	3	11.4088	EA	34.23
JMCM1020-1MB 1020 MESH FLAT BLACK 50/BNDL 48/PT	50	1	29.9402	CS	29.94
JMCTR1GB TALL ROUND 1 GL BLACK 144/BG	144	20	34.8326	BG	696.65
JMCM17S-1B 17"SQ PROPAGATION FLAT BLACK 60/BNDL 30CS/PLT	60	15	57.5085	CS	862.63
JMCTS35B 3 1/2" SQ TECH POT BLACK-17" 1375/CASE	1375	15	64.8741	CS	973.11
NET0303420LL-B COOLNET FOGGER WITH LOW PRESSURE LPD (PURPLE PIN) This item will ship from Sumner, WA	1	25	5.1502	EA	128.76

ORDER NO. 714-894-0581

PAGE 2 OF 2

BILL TO

115727
MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

SHIP TO

MERCED COLLEGE
3600 "M" STREET
MERCED, CA 95348-2898

QUOTE DATE 09/18/14	EXPIRE DATE 10/18/14	SALES REP 11 /	WRITTEN BY KATHY VUKAN	PAYMENT TERMS O.A.C. NET 30 DAYS
CONTACT BRYAN TASSEY		PHONE 209-384-6301	EMAIL	SHIP VIA LEAST EXPENSIVE WAY

PRODUCT / DESCRIPTION	PACK COUNT	QUANTITY	PRICE	U/M	EXTENSION
-----------------------	------------	----------	-------	-----	-----------

JMCDEL40 40 DOLLAR JMC STANDARD DELIVER CHARGE	1	1	40.0000	EA	40.00
--	---	---	---------	----	-------

MERCHANDISE TOTAL	HANDLING	MISC CHARGE	TAX	EST. FREIGHT	QUOTE TOTAL
3,073.61	0.00	0.00	242.68	0.00	3,316.29

Shopping Cart

The following Radio Flyer product(s) have been added to your shopping cart:

	Product Name	Unit Price	Qty	Subtotal
	CLASSIC RED WAGON	\$99.99	<input type="text" value="25"/>	\$2,499.75
Continue Shopping		Update Shopping Cart		

Please consider the following when selecting a shipping address: most Radio Flyer products arrive in their original packaging (not a brown box)

PROMOTION CODE (Limit One)

Please enter your promotion code if you have one.

[Apply Promotion](#)

GIFT CARD

Please enter your gift card code if you have one.

[Add Gift Card](#)

Estimate Shipping and Tax

Enter your destination to get a shipping

Subtotal	\$2,499.75
Shipping & Handling (United Parcel Service - UPS Ground)	\$492.75
Tax	\$181.23
Total	\$3,173.73

[View Return Policy](#)
[Proceed to Checkout](#)

[Home](#) | [Shopping Cart](#) | [Q](#)

[Climbing](#) | [Rigging](#) | [Rope](#) | [Pruning](#) | [Safety & Clothing](#) | [Tools](#) | [Plant Health](#) | [More](#) | [New Products](#)

Shopping Cart
[Continue Shopping](#)
Cart:

☒ Shop Online
 ☐ Pick Up at Store

PRODUCT	AVAILABILITY	QTY	EACH	TOTAL
Full Wrap-Around Pro Chaps 36" SKU: JE9138 Change Attributes Remove	In Stock	<input type="text" value="6"/>	\$69.33	\$415.98
ProVest™ II Chainsaw Protection Vest Large SKU: JE70L Change Attributes Remove	Back Order Available	<input type="text" value="6"/>	\$60.79	\$364.74
ProGloves™ II Chainsaw Protection Gloves Large SKU: JEGLV50L Change Attributes Remove	In Stock	<input type="text" value="10"/>	\$26.63	\$266.30
P120 8" Ergo Pruner SKU: P120 Remove	Back Order Available	<input type="text" value="30"/>	\$35.40	\$1,062.00
Leyco Happy Line Bypass & Fine Nose Pruners Combo Pack Blue SKU: 46352150 Change Attributes Remove	Back Order Available	<input type="text" value="30"/>	\$25.59	\$779.70

Promotional code: [Apply](#)

Order Subtotal: \$2,908.72
 Discount: \$0.00
Order Total: \$2,908.72

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 2 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Equipment replacement and Digital Camera

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative: The Toro Dingo is a vital part of my program. I use the piece of equipment every day and students learn hands on with different implements. This item is now 4 years old and in need of new engine and tracks. Our mechanic has looked at the motor and called Toro direct and the best solution would be to replace the motor and keep the old one for parts. The new tracks are for replacements. The current tracks are close to being worn out and visual chips and cracks are present.

The digital camera set up is for taking pictures to enhance lectures and social media. Many hours have been spent developing curriculum and one of the most challenging aspects is finding free, good quality images. The suggested macro lens will allow me to take up close pictures of insects and flower parts. This is vital not only for classroom instruction but also social media. People are engaged by photos, not text and as I develop the our social media strategies this camera will be able to take the Agriculture Department to the next level.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒
(Place an X next to the correct response)
If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

N/A

Project 1		<p>Double Click Worksheet to enter data</p> <p>Data can only be placed in the blue cells.</p> <p>(Rounded off to the nearest whole dollar)</p>
-----------	--	--

[illegible]

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

CAL-LINE EQUIPMENT INC.

of SACRAMENTO
1430 Auburn Blvd
Sacramento, CA 95815

Estimate

Date	Estimate #
10/22/2013	690

Name / Address
Merced College Hort. Dept attn: Bryan Tassey 3600 M Street Merced CA 953488

Ship To

P.O. No.	Terms	Rep	Project
	Prepaid	SP	

Item	Description	Qty	Cost	Total
	Estimate for replacement parts for TX420 22306-260000658			
PA-CH640-3019	CH640S Toro Dingo Replaces CH20S-64725. Plus Incoming Freight.	1	1,566.44	1,566.44T
98-9800	Track (Narrow)	2	415.99	831.98T
	Subtotal			2,398.42
Incoming Freight	Estimated Incoming Freight: (For engine).	1	100.00	100.00T
Incoming Freight	Estimated Incoming Freight: (for Tracks).	1	60.00	60.00T
	I could have all items in less than a week. City of Merced - Merced County		8.00%	204.67

[www.bestbuy.com/site/olspage.jsp?cid=pcat17005&type=page](#)

bestbuy

Expert Service. Unbeatable Price.

Weekly Ad

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Gift Cards

Gift Ideas

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Store Finder

PRODUCTS

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DEALS

Search Best Buy

[Sign In](#)
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Your Cart

Your Location: 95340

Used to estimate arrival dates, s

Nikon - Cable

Model: MC-DC2

Weekly Ad

This week's best deals, all in one place.

Deal of the Day

A great deal, today only.

Best Buy Outlet

Clearance, pre-owned, refurbished and open-box.

Hottest Deals

Great deals happening right now.

College Student Deals

Smart offers and coupons for students only.

Black Friday

The latest best, the lowest prices, no limits.

Cyber Monday

Our biggest deals in our biggest store.

Continue Shopping

70-200mm f2.8 L

Canon - Bundle EF 70-200mm f/2.8L USM Zoom Lens

Model: 2669A004-83609-101

Shipping \$17.95

Only Available for Shipping

Get it by:

Tue, Nov 11 - \$17.95

Standard

Fri, Nov 7 - \$37.95

Expedited

Thu, Nov 5 - \$82.95

Express

Sold & Shipped by:

CAMERA CAMERA

Not returnable to Best Buy Stores.

Marketplace

\$24.49

ON SALE

Reg. \$35.99

You Save: \$11.01

Remove

Canon - Speedlite 270EX II External Flash

Model: 6247B002

Store Pickup FREE

Select a store

Shipping

Get it by:

Mon, Nov 10 - FREE

Standard

Tue, Nov 4 - \$11.99

Expedited (Order by 9:30 pm PT)

Mon, Nov 3 - \$19.99

Express (Order by 9:30 am PT)

\$139.99

ON SALE

Reg. \$169.99

You Save: \$30.00

Remove

www.bestbuy.com/site/canon/speedlite-270ex-ii-external-flash

14

Canon - Macro Twin Lite
MT-24EX External Flash
Model: 2357A002

Shipping **FREE**

Only Available for Shipping

Get it by:

- ☒ **Mon, Nov 10 - FREE**
Standard
- ☐ **Tue, Nov 4 - \$11.99**
Expedited (Order by 3:30 pm PT)
- ☐ **Mon, Nov 3 - \$19.99**
Express (Order by 3:30 pm PT)
- ☐ **Sat, Nov 1 - \$27.49**
Saturday (Order by 3:30 pm PT)
Residential addresses only

\$769.99

ON SALE

Reg. \$829.99

You Save: **\$60.00**

1
Remove

Canon - Bundle EF 100mm
f/2.8 L IS Macro USM Lens
Model: 3554B002-83392-Klt

Shipping \$15.95

Only Available for Shipping

Get it by:

- ☒ **Tue, Nov 11 - \$15.95**
Standard
- ☐ **Fri, Nov 7 - \$34.95**
Expedited
- ☐ **Thu, Nov 6 - \$59.95**
Express

Sold & Shipped by:
CAMERA CAMERA

Not returnable to Best Buy Stores.

Marketplace
\$974.95

1
Remove

Canon - EOS 7D Mark II DSLR
Camera (Body Only) - Black
Model: 9128B002

☒ **Store Pickup FREE**

Select a store

☐ **Shipping**

Get it by:

- ☐ **Tue, Nov 4 - FREE**
Express

\$1,799.99

1
Remove

Estimates calculated for 95340

Product Total \$5,184.36

Shipping \$33.90

Estimated Sales Tax \$203.25

Estimated Order Total \$5,421.51

Checkout

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 3 (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Trade Show Professional Development/ Field Trips

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

This proposal is to attend the Far West Horticultural Trade Show in Portland Oregon. I have never attended and this would serve as not only professional development but allow me to keep up on trends and find new vendors for my program. There are also a few close by areas to visit such as the World Forestry museum and Portland Botanical Gardens which is why a rental car is being requested. This would be for a three day trip for two nights and only one day of instruction would be missed. Opportunities like this are vital to the health and growth of my program. Seeing tradeshow and gardens first hand allow me to communicate to my students what is out there in the industry rather than show them via websites.

The additional \$1,000 is for field trips throughout the year for instruction.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐

(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☒

(Place an X next to the correct response)

If yes, then for how many years? _____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

Itemize and list the cost of items to be purchased for the Proposed Activity:

Project 1		Double Click Worksheet to enter data Data can only be placed in the blue cells. (Rounded off to the nearest whole dollar)			
Line No.	Acct. No.	Object of Expenditure	Qty	Price Each	TOTAL
1	1000	Instructional Salaries Explain teaching assignment on a separate sheet and attach			
					\$0.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$0.00
2	2000	Non- Instructional Salaries Explain support being provided on a separate sheet and attach			
					\$0.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$0.00
3	3000	Employee Benefits Contact Payroll for this information			\$0.00
4	4000	Supplies (Consumables) Attach a list of supplies needed			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Supplies			\$0.00
5	5000	Other Operating Exp. (Attach a list of all Conference & Travel, Equipment Repairs, and Contract Services to funded			
		Far West Trade Show - Portland Oregon	1	\$920	\$920.00
		Field Trips	1	\$1,000	\$1,000.00
					\$0.00
					\$0.00
		Total Expenditures in Other Operating Exp			\$1,920.00
6	6000	Capital Outlay (List each piece of Equipment and the cost below. Also attach a quote for each piece of equipment.)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Capital Outlay			\$0.00
		Total Project Expenditures			\$1,920.00

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

Flight: 1 roundtrip ticket

Traveling to Portland

Thu 27-Aug-15

Sacramento (SMF)	to Portland (PDX)	479 mi (771 km)
Depart 9:40 am	Arrive 11:24 am	Duration: 1hr 44mn	Flight: 2526
Terminal B			Operated by: HORIZON AIR AS ALASKA AIRLINES

Economy/Coach Class , DE HAVILLAND DHC-8 DASH 8-400 DASH 8Q

Total distance: 479 mi (771 km) Total duration: 1hr 44mn

Traveling to Sacramento

Sat 29-Aug-15

Portland (PDX)	to Sacramento (SMF)	479 mi (771 km)
Depart 10:40 am	Arrive 12:23 pm	Duration: 1hr 43mn	Flight: 2541
Terminal B			Operated by: HORIZON AIR AS ALASKA AIRLINES

Economy/Coach Class , DE HAVILLAND DHC-8 DASH 8-400 DASH 8Q

Total distance: 479 mi (771 km) Total duration: 1hr 43mn

[Choose a different flight for this package.](#)

Hotel: 1 room for 2 nights

Crowne Plaza Portland Downtown Convention Center

☆☆☆½ Portland, OR

Located in the heart of Portland, this family-friendly hotel is within walking distance of Oregon State Hospital Portland and Memorial Coliseum.

[More lodging info](#)

Check-in: Thu 27-Aug-15 Check-out: Sat 29-Aug-15

Room options		Price
☒	Room, 1 King Bed, Non Smoking - Advance Purchase Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	Included
☐	Room, 2 Queen Beds, Non Smoking - Advance Purchase Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	+ \$5.16 per night
☐	Executive Room, 1 King Bed with Sofabed, Non Smoking Includes: Free High-Speed Internet, Free Airport Shuttle	+ \$19.65 per night
☐	Room, 1 King Bed, Non Smoking	+ \$29.85 per night
☐	Room, 2 Queen Beds, Non Smoking Includes: Free High-Speed Internet, Free Wireless Internet, Free Airport Shuttle	+ \$35.59 per night
More rooms/units... Choose a different hotel for this package.		

Car: 2-day rental

Standard Car

Hertz

- Air conditioning, automatic transmission, unlimited mileage.
- Nissan Altima or similar, 5 adults, 3 small carry-ons, 2 - 4 doors.

[Need a different car?](#)

Pick-up:
Thu 27-Aug-15 11:00 AM

Drop-off:
Sat 29-Aug-15 10:00 AM

Location: , Portland, OR (PDX)

Car class		Price
☐	No Car Selected	- \$53.97 per day
☒	Standard Car	Included
Choose a different car class or vendor for this package.		

Register Today!

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The Farwest Trade Show!

The largest green industry trade
show in the West!

Gain valuable new ideas, new
energy, source new products and
new innovations for your business!

Register Today!

Register today for the 2014 Farwest Trade Show
Discount pricing only available through July 31!

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3-Day Expo Only Pass

Regular Pass

OAN Members and Exhibitors Discount Pass
Special \$5 Discount Pricing for Exhibitors and
OAN Members

	Early-Bird through July 31	After July 31 and onsite
Regular Pass	\$10	\$15
OAN Members and Exhibitors Discount Pass Special \$5 Discount Pricing for Exhibitors and OAN Members	\$5	\$5

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2014-2016 Perkins Funds
PART II: Project Proposal(s)
As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name Landscape Horticulture Program TOP Code: 0109

Name of faculty member submitting the application Bryan Tassey

Name of Dean for your Area. James Andersen

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking 4_____ (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: Work Study Student

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

A work study student is crucial to the success of the Horticulture program. Plants don't sleep or water themselves and must need constant care in order for students in class to have a positive learning environment. This position would employ a student for fall and spring semesters to work at the Horticulture Unit. This would be a great resume builder and the best way to gain additional skills and responsibility.

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☒ No ☐
(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☒ No ☐
(Place an X next to the correct response)
If yes, then for how many years? 3_____

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

N/A

		Instructional Aid Range 4 @ 9.37 hr x 10% workers comp	1	\$11,131	\$11,131.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$11,131.00
3	3000	Employee Benefits Contact Payroll for this information			\$0.00
4	4000	Supplies (Consumables) Attach a list of supplies needed			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Supplies			\$0.00
5	5000	Other Operating Exp. (Attach a list of all Conference & Travel, Equipment Repairs, and Contract Services to funded)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Other Operating Exp			\$0.00
6	6000	Capital Outlay (List each piece of Equipment and the cost below. Also attach a quote for each piece of equipment.)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Capital Outlay			\$0.00
		Total Project Expenditures			\$11,131.00

ROUND ONE WORKSHEET

435		11/15/2014 10:45 HORTICULTURE / VTEA 2014 - 2015														
ACCOUNT	NAME	GROSS EXPENSES	PERCENT	BEN CODE	Salary/Range/ Start Date	MONTHS	ALLOCATED EXPENSES	STRS	PERS	FICA	H&W	SUI	W/C	IP	TOTAL BENEFITS 3000	TOTAL EXPENSES
CLASS	General fund Student Benefits 2100/2300 (20/80) General fund Student Class hourly aide Benefits 2200/2400 (11/71) Object 2000 Sub-total	\$0.00	100.000	5		Hrly	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
								0.00	0.00	0.00	0.00	0.00	0.00	0.00		
124.52328.649900.435		\$0.00	100.000	5		Hrly	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
124.52428.010900.435		\$0.00	100.000	5		Hrly	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
124.52420.010900.435		\$0.00	100.000	5		Hrly	\$0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$0.00	\$0.00
							\$0.00									
EXPENSES																
124.54310.010900.435		\$0.00	100.000				\$0.00								\$0.00	\$0.00
124.54410.010900.435		\$0.00	100.000				\$0.00								\$0.00	\$0.00
							\$0.00									
124.55210.010900.435	Conf Travel	\$0.00	100.000				\$0.00								\$0.00	\$0.00
124.55220.010900.435	Field Trip	\$1,000.00	100.000				\$1,000.00								\$0.00	\$1,000.00
124.55230.010900.435	Mtg Exp	\$0.00	100.000				\$0.00								\$0.00	\$0.00
124.55360.010900.435	Duplicating	\$0.00	100.000				\$0.00								\$0.00	\$0.00
124.55610.010900.435	Contr. Services	\$0.00	100.000				\$0.00								\$0.00	\$0.00
	Object 5000 Sub-total						\$1,000.00									
124.56410.010900.435	Instr Equipmt	\$24,047.00	100.000				\$24,047.00								\$0.00	\$24,047.00
	Object 6000 Sub-total						\$24,047.00									
TOTALS							\$25,047.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25,047.00

All Budget/Revenue/Awards are ESTIMATES

Manager: Bryan Tassey

Dean: Jim Andersen

Interim VP: Kevin Kistler

124.48170.800000.400

GRANT AWARD

\$25,047.00

(\$0.00)

All encumbrances, including equipment and software being purchased, must be received, installed and operational within 90 days of the end of the award period to declare those dollars are legally encumbered and spent.

C:\Users\Tree Partners\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\QPHA9A2K\435-Horticulture VTEA435-Horticulture VTEAHorticulture11/15/201410:45 AM

Perkins supplies

Project 1							
Frantz soil and plants							\$3,616
McConkey Co - soil, containers and general suplies							\$4,919
Field Trips					\$1,000.00		
Project 3							
Vibratory plow and Soil Cultivator							\$15,512.00

Plant sale revenue April 5th 2014

	Sales	Refunds	Net
Gross Sales	\$14,153.00	\$0.00	\$14,153.00
Discounts	\$0.00	\$0.00	\$0.00
Net Sales	\$14,153.00	\$0.00	\$14,153.00
Tax	\$0.00	\$0.00	\$0.00
Tips	\$0.00	\$0.00	\$0.00
Total Collected	\$14,153.00	\$0.00	\$14,153.00
Cash	\$7,008.50	\$0.00	\$7,008.50
Card	\$6,201.00	\$0.00	\$6,201.00
Gift Card	\$0.00	\$0.00	\$0.00
Other	\$943.50	\$0.00	\$943.50
Fees	(\$170.67)	\$0.00	(\$170.67)
Net Total	\$13,982.33	\$0.00	\$13,982.33

District Budget Process

Career Technical Education (CTE) programs at Merced College are funded the Carl D. Perkins Vocational and Technical Education Act. Public Law 105-332

The Perkins Act defines vocational-technical education as organized educational programs offering sequences of courses directly related to preparing individuals for paid or unpaid employment in current or emerging occupations requiring other than a baccalaureate or advanced degree. Programs include competency-based applied learning which contributes to an individual's academic knowledge, higher-order reasoning, problem solving skills, and the occupational-specific skills necessary for economic independence as a productive and contributing member of society.

<https://www2.ed.gov/offices/OVAE/CTE/perkins.html>

In October of each year we receive a call for applications as stated in the email below. If approved, funding will be allocated approximately July 1st of the following year. Programs reviews must be up to date which are due every February.

Additional funding is through our plant sales that are faculty driven. In 2014 gross sales were \$14,000.00

Greetings CTE Faculty

The process for applying for CTE Program funding through the Perkin's Title I-C (VTEA) Grant is approaching. In preparation for that process, the Perkin's Title I-C (VTEA) Local Grant Application is attached, and as in past years, to insure the applications are completed correctly and routed to the proper Deans, I will be offering training sessions to those applying for funds. The application process has not changed therefore these sessions are not a requirement, however are encouraged to insure each program applying for funds submits a complete application. **Keep in mind that all resources requests must be supported by a current comprehensive review as well as a current annual program review update.**

October 6, 2-3pm

October 8, 8:30-9:30am

October 9, 4-5pm

October 10, 11am-12pm

You will be receiving a meeting invite for each session being scheduled, please click **Accept on the one** training you want to attend, and click **Decline on the remainder** of the invites. This will allow me to know who will be attending each training. If none of these sessions will fit into your teaching schedule, please contact me and we can set up one that will work for you.

The due date for the 2015-16 Local Perkin's Title I-C (VTEA) Application is Friday, October 31st. Please remember to submit your applications to your Area Dean. Each Dean will collect all applications from the programs in their areas for their review. Once reviewed by the area dean, the applications will be forwarded to me. Please remember to imbed an image of the required quotes after each of the related projects within the application you submit.

If you have any questions feel free to contact me by phone or email.

Thanks,

Jim

Jim Andersen

Dean of Instruction

Merced College

Agriculture - Industrial Technology - Kinesiology

Merced College - Perkins Title I-C (VTEA) Local Application

Please read the instruction very carefully and include all information requested.

Attached is the Local 2015-16 Perkins Title C-1 (VTEA) Application. The application process will be completed in two phases. The first phase of the application is attached and due by Friday, October 31st 2014. This phase concentrates on; Part I, the Program Improvement Cover Sheet, and Part II, the project proposal(s). Please save your applications with your program name as part of the file name and once completed, email it to the Dean of your Area. (due date 10-31-14) Your applications will be reviewed by the Dean of your Area, the Merced College VP's, and a VTEA Advisory Committee Review Process. At this point, those proposals approved for funding will complete the second phase of the application. The second phase is retrieving the core indicator and student success data. This will take place when the Chancellor's Office makes the Core Indicator information available (sometime in mid-January to mid-February).

You will note that the Cover Page (Part I) contains a hyperlink that will take you to the CuricUNET site where the IPR's are located. The answers to the questions on cover page come directly from Section III of your current Program Review.

The second page of the application, (Part II) is where you create the Project Proposal(s) The Project Proposal Narrative on that page comes directly from Section IV of your current Program Review. If you have multiple project proposals to address your Program Improvement Plan, they must be listed on separate Part II pages and must be listed in order of priority and numbered to reflect their priority ranking.

The Project Proposal Budget is the third page and when completed should reflect the total cost of the project as it is broken down into the various types of expenses (Salaries, services, supplies, and equipment). Again, each project proposal must have a separate budget page as well.

Before a project will be approved, all equipment, supplies, software, and travel requested must have a quote included with the application and be in an electronic

format and pasted onto the blank pages at the end of the application. In addition, all additional information requested on the budget sheet (**written in red**) of the application must also be included with the application before a project will be approved.

Keep in mind that all resources requests must be supported by a current comprehensive review as well as a current annual program review in the years following the comprehensive review.

If you have any questions feel free to contact Jim Andersen at x6396.

Thanks,

Jim Andersen
Merced College
Dean of Instruction, Area 3
Agriculture - Industrial Technology - Life Fitness
Office (209) 384-6396
Email - andersen.j@mccd.edu

Merced College
Career Technical Education

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds
PART I: Cover Page
Program Improvement Plan
As stated in Section III of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name _____ Program TOP Code: _____

Name of faculty member submitting the application _____

Name of Dean for your Area. _____

On the following two questions; first give details to the “Big Picture” as it relates to the overall program improvements needing to be addressed, and in question two, explain what steps are being taken to address these program needs. Each Program only needs to submit one Cover

- A. Briefly describe program improvement issue(s) concerning this TOP code and include specific examples. (Limited to 2,000 characters, or approximately ½ page of text.)
- B. Briefly describe how the issue(s) will be addressed. (Limited to 2,000 characters, or approximately ½ page of text.)

MERCED COMMUNITY COLLEGE
APPLICATION WORKSHEET FOR 2015-2016 Perkins Funds

PART II: Project Proposal(s)

As stated in Section IV of the current Program Review

Control Click Here for **CurricUNET** IPR Site: http://www.curricunet.com/merced_reviews/

Program name _____ Program TOP Code: _____

Name of faculty member submitting the application _____

Name of Dean for your Area. _____

Please complete one Project Proposal Worksheet for each program improvement project you are submitting. If you are submitting more than one proposal, please place a priority ranking on each.

Project Priority Ranking _____ (Place a ranking, from highest priority to lowest priority if you submit more than one proposal)

Project Proposal Title: _____

In the space below, answer the questions as they pertain to this proposal.

A. Project Proposal Narrative:

B. Is this project included in the Instructional Program Review's Resource Request? Yes ☐ No ☐

(Place an X next to the correct response)

C. Has this project been funded with Perkins (VTEA) dollars in past years? Yes ☐ No ☐

(Place an X next to the correct response)

If yes, then for how many years? _

D. List any grants your program currently receives and how these funds are used to address program needs as outlined in your program review.

Itemize and list the cost of items to be purchased for the Proposed Activity:

Project 1		<p align="center">Double Click Worksheet to enter data Data can only be placed in the blue cells. (Rounded off to the nearest whole dollar)</p>			
Line No.	Acct. No.	Object of Expenditure	Qty	Price Each	TOTAL
1	1000	Instructional Salaries Explain teaching assignment on a separate sheet and attach			
					\$0.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$0.00
2	2000	Non- Instructional Salaries Explain support being provided on a separate sheet and attach			
					\$0.00
					\$0.00
		Total Expenditures in non-Inst. salaries			\$0.00
3	3000	Employee Benefits Contact Payroll for this information			\$0.00
4	4000	Supplies (Consumables) Attach a list of supplies needed			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Supplies			\$0.00
5	5000	Other Operating Exp. (Attach a list of all Conference & Travel, Equipment Repairs, and Contract Services to funded			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Other Operating Exp			\$0.00
6	6000	Capital Outlay (List each piece of Equipment and the cost below. Also attach a quote for each piece of equipment.)			
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
		Total Expenditures in Capital Outlay			\$0.00
		Total Project Expenditures			\$0.00

Submitted by: _____

Date: _____

Area Dean: _____

Date: _____

PROPOSALS MUST BE SUBMITTED IN ELECTRONIC FORMAT (Email) TO THE DEAN OF YOUR AREA, and a copy CC'd to Jim Andersen NO LATER THAN: Friday, October 31st 2014

Area Dean Review and Comments:

Paste images of Quotes on the following pages.

Insert a copy of all Quotes on the following pages.

(You may need to scan your quotes, save as a jpg file, and insert them as a Picture)

Duties and responsibilities

As a single person program, I am responsible for every aspect of the program. Below are bullet points of my general duties.

- Oversee facilities – 2,000 sf of Greenhouse, 4,000 SF of shade, veggie garden (29 raised beds), fruit tree orchard, turf area, motherstock, and 4,000 of full sun growing area.
- Annual Plant Sale
- Supervise two work study students per semester and a technician three hours per week.
- Recruitment
- Annual and Comprehensive Reviews
- Title five compliance
- Community outreach
- Provide instruction for ten different classes with labs.
- Faculty Lead for Agriculture and Industrial Technology
 - Instructional Council
 - Instructional Master Planning committee
- Academic Senate – Rep

Reimbursement Process

- District Funds – The first step is filling out a trip request with all details of where, when, why and identifying the funding source. Only items listed on the approved trip request will be reimbursable.
- Foundation funds (through plant sales) – As long as the request is under \$2,000.00 the only signature required is a Dean. If over \$2,000.00, a Dean and Vice President must sign.

OFFICIAL MERCED COMMUNITY COLLEGE DISTRICT FORM

CLAIM

FISCAL SERVICES/#2051/REVISED, JANUARY 2013

NOTE: EACH INDIVIDUAL MUST SUBMIT THIS CLAIM FOR APPROVED EXPENSES FOR APPROVED TRIPS OUTSIDE AREA SERVICED BY THE DISTRICT. SEE BOARD POLICY 7400

DATE : _____

NAME : _____ DATATEL NO. : _____

PURPOSE OF TRIP : _____ DESTINATION : _____

DEPARTED	DATE:	_____	RETURNED	DATE:	_____
	TIME:	_____		TIME:	_____

MODE(S) OF TRAVEL USED:

- ☐ AIRPLANE/TRAIN/BUS/RENTAL (*RECEIPT REQUIRED*) \$ _____
- ☐ PRIVATE CAR

TOTAL MILEAGE AMOUNT

TOTAL NUMBER OF MILES (ROUND TRIP) _____ @ _____ = \$ _____

LODGING: EXPENSES FOR TRIPS OVER 24HRS, OUTSIDE OF THE DISTRICT BOUNDARIES SHALL BE REIMBURSED IF DEEMED PRUDENT AND REASONABLE AS PER BOARD POLICY 7400. (*RECEIPT REQUIRED*)

DAYS _____ @ \$ _____ (INCLUDES HOTEL TAXES/FEES) = \$ _____

MEAL ALLOWANCE: NO RECEIPT REQUIRED

_____ BREAKFAST (____) _____ LUNCH (____) _____ DINNER (____)

PRIOR TO 7:30 AM AFTER 5:30 PM

\$ _____

* LESS MEALS COVERED BY REGISTRATION

\$ _____

OTHER EXPENSES: *RECEIPT REQUIRED*

- ☐ REGISTRATION (PAID BY CLAIMANT) \$ _____
- ☐ PARKING/TAXI/SHUTTLE \$ _____
- ☐ OTHER EXPENSE \$ _____

OTHER EXPENSE DESCRIPTION

TOTAL EXPENSES: _____
CLAIM NOT TO EXCEED AMOUNT _____
(LISTED ON TRIP REQUEST) _____

AREA DEAN/DEPARTMENTAL MANAGER'S SIGNATURE _____ REIMBURSEMENT FOR **TOTAL EXPENSES OR NOT TO EXCEED AMOUNT (WHICHEVER IS LESS)** _____

CLAIMANT

AREA VICE PRESIDENT/PRESIDENT'S SIGNATURE _____

SIGNATURE CERTIFIES CLAIM FOR ACTUAL EXPENDITURES

FISCAL SERVICES USE ONLY:

VOUCHER: _____ DL ☐ _____

AMOUNT: _____ INS ☐ _____

CHECK # : _____ CHECK DATE: _____

FISCAL SERVICES APPROVAL

☐ DISCUMBRANCE COMPLETED

ACCOUNT LINE _____ AMOUNT \$ _____

ACCOUNT LINE _____ AMOUNT \$ _____

ROUTING PROCEDURE: INITIATOR>MANAGER/DEAN APPROVAL>VP/PRESIDENT APPROVAL>FISCAL SERVICES>cc:FISCAL SERVICES

OFFICIAL MERCED COMMUNITY COLLEGE DISTRICT FORM

TRIP REQUEST

FISCAL SERVICES/#2050/REVISED, JANUARY 2013

DATE: _____

NAME: _____ DEPARTMENT: _____

DRIVER(S): _____ NO. OF STUDENTS (ATTACH LIST)

PASSENGERS: _____ DESTINATION (CITY,STATE) _____

PURPOSE OF TRIP
(ATTACH FLYER,AGENDA,ETC)

DEPARTING	DATE: _____ TIME: _____	RETURNING	DATE: _____ TIME: _____	MEETING	START DATE: _____ TIME: _____ END DATE: _____ TIME: _____
-----------	----------------------------	-----------	----------------------------	---------	--

MODE OF TRAVEL REQUESTED:

☐ PRIVATE CAR ☐ (9) PASS. VAN ☐ (14) PASS. VAN ☐ OTHER _____

TOTAL NUMBER OF MILES, ROUND TRIP _____ @ _____

☐ AIRPLANE/TRAIN/BUS/RENTAL (*RECEIPT REQUIRED FOR CLAIM*) \$ _____ = \$ _____

ESTIMATED LODGING: EXPENSES FOR TRIPS OVER 24HRS, OUTSIDE OF THE DISTRICT BOUNDARIES SHALL BE REIMBURSED IF DEEMED PRUDENT AND REASONABLE PER BOARD POLICY 7400. ***RECEIPT REQUIRED FOR CLAIM***

DAYS _____ @ \$ _____ PAY IN ADVANCE (ATTACH HOTEL CONFIRMATION) ☐ = \$ _____

MEAL ALLOWANCE: NO RECEIPT REQUIRED

_____ BREAKFAST (____) _____ LUNCH (____) _____ DINNER (____)
PRIOR TO 7:30 AM AFTER 5:30 PM

* LESS MEALS COVERED BY REGISTRATION (IF ANY)

OTHER NECESSARY EXPENSES: (*RECEIPT REQUIRED FOR CLAIM*)

☐ REGISTRATION \$ _____ PAY IN ADVANCE (ATTACH REGISTRATION INFO) ☐
☐ PARKING/TAXI/SHUTTLE \$ _____
☐ OTHER EXPENSE \$ _____

OTHER EXPENSE DESCRIPTION

TOTAL EXPENSES: _____

NOT TO EXCEED AMOUNT
(MAX AMOUNT AUTHORIZED FOR THIS TRIP AS PER BP/AP 7400)

ACCOUNT NUMBER: _____

ACCOUNT NUMBER: _____

REQUESTED BY: _____ EXT. _____ STOP # _____

TOTAL REQUESTED: _____

APPROVALS

AREA DEAN / DEPARTMENTAL MANAGER

AREA VICE PRESIDENT/ PRESIDENT

FISCAL SERVICES USE ONLY

VOUCHER _____ DATE _____
 PAYEE: _____
 CHECK # _____ DT# _____

VOUCHER _____ DATE _____
 PAYEE: _____
 CHECK # _____ DT# _____

ENC # _____ AMT \$ _____

DISC # _____ AMT \$ _____

VOUCHER _____ DATE _____
 PAYEE: _____
 CHECK # _____ DT# _____

VOUCHER _____ DATE _____
 PAYEE: _____
 CHECK # _____ DT# _____

DRIVING CLEARANCE
 INS ☐ _____ SM ☐ _____
 DL ☐ _____ TD ☐ _____

FISCAL SERVICES APPROVAL