

ATTACHMENT "A"
Academic Year 2017-2018

Program (Discipline) or Department Name	TOPS (Required for programs)
Plant Science	010300

List the projects included in your 2017-2018 by name and number

Number	Project Name	Total Perkins Funds Requested
1.0	Soil water vacuum extractor, glassware, and filters	\$1,000
2.0	Replacement electrodes for selective ion meters	\$3,000
3.0	Soil hydrometers	\$300
4.0		
5.0		
Total Amount of Perkins Funds Requested		\$4,300

Perkins Discipline/Department Planning/Implementation Team

VTEA Primary Contact Name	Phone	Email Address
Greg Cluff	661-395-4697	gcluff@bakersfieldcollege.edu

List other departments/discipline members/key staff who will be involved in the 2017-2018 Perkins plan and implementation:

Name	Phone	Email Address

Signatures (Required)

Your signature below indicates that this proposal has the support of the department/discipline and that the plan is aligned with overall college objectives:

Department Chair (Date)

Dean, Career Technical Education (Date)

**ATTACHMENT “B” (Limit to one project)
Academic Year 2017-2018**

Program (Discipline) or Department Name	TOPS (Required for programs)
Plant Science	010300

Description of Project

Number	Project Name	Total Perkins Funds Requested
2.0	Replacement electrodes for selective ion meter	\$3,000

Limit to one project

<p>Briefly describe gap to be addressed (Briefly describe program improvement issue(s))</p>	<ul style="list-style-type: none"> ● Brief Summary of Request: We need three replacement electrodes for our specific ion meter; nitrate electrode, potassium electrode, and pH electrode. ● Brief Rationale of Program: These electrodes have been in service for over 5 years and are not in working order anymore. We need these electrodes (that attach to one of two of our selective ion meters) in order to measure the amount of usable nitrogen and potassium and pH of soil samples. Without these probes, we cannot meet the requirements of the COR for either Soil B1 or Crops B5 (Plant Science). ● Improvement Issues: Lack of adequate equipment and supplies for a good environment to learn skills needed in the industry. ● Core Indicators to Address: Labor Market: Core 3 – Persistence – Students get discouraged having to waste time trying to get old electrodes to equilibrate and obtain accurate readings in the labs. Some have complained to me and to administration about the lack of good, up-to-date, and usable equipment in the labs. Core 4 - Employment as a Certified Crop Advisor, Soils Specialist, Conservation Scientist, Environmental Scientist, Plant and Soil teacher or Crop Manager. ● Supporting Labor Market Data (data provided by SOC Code): 3,529 Workers in service area in SOC codes of professions needing expertise in soil analysis using extraction equipment. ● EMSI Data: 3,709 workers needed in service area in SOC codes of professions above by 2021. That is an increase of 5.1% in five years.
<p>Briefly describe how the gap(s) will be addressed (Briefly describe how the issue(s) will be addressed)</p>	<p>Core 3 - Use of the newer, more accurate, and faster electrodes will result in a much better hands-on educational experience and better persistence.</p> <p>Core 4 - The skills developed by using this equipment is absolutely necessary to obtain employment as a Certified Crop Advisor or Soil Scientist in the industry.</p>
<p>Measurement or Evidence of Project Success</p>	<ul style="list-style-type: none"> ● Identify specific core indicator measures to be improved/evidence: Core 3 – Persistence, as evidenced by improvement in Perkins IV Core Data Core 4 - Employment, as evidenced by improvement in Perkins IV Core Data ● Other measures to be improved/evidence:

Description of Project Activities and Spending Plan (add or delete rows as needed):

No.	Describe Activity	Timeline	Must Reference Requ'd. Use	Approx Amount of Funds Requested	Object Code	Description of Vendor
2.0	Obtain new nitrate, potassium, and pH electrodes for our two selective ion meters	All materials should be obtained by fall semester 2017	Core 3 Core 4	\$3,000	6000 equipment	VWR Scientific
<p>Describe project details including:</p> <ul style="list-style-type: none"> • who will responsible for project • when it will be done • what outcomes are expected or targeted and • how/when/who assessment will be reported 						
<ol style="list-style-type: none"> 1. Who will responsible for project? Greg Cluff 2. When it will be done? By fall 2017 semester 3. What outcomes are expected or targeted? Allow students to effectively and efficiently use common equipment for measuring important soil parameters and give them hands-on experience needed to obtain jobs in the industry. 4. How/when/who assessment will be reported? Beginning in fall 2017, Core 3 and Core 4 indicator data will be tracked to see if there is an uptick in persistence and employment. 						