

A Transfer Students Guide to Becoming a PCA

A Senior Project

Presented to

The Faculty of Agricultural Education and Communication Department

California Polytechnic State University, San Luis Obispo

In Partial Fulfillment

of the Requirements for the Degree

Bachelor of Science

By

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Introduction

Many incoming transfer students pursuing the agricultural science degree within the Agricultural Education and Communication Department (AGED) at California Polytechnic State University, San Luis Obispo, have ambitions to go on to become PCA's (Pest Control Advisors) at some point during their careers. Their challenge as a transfer student is fitting the required PCA courses into the right course sequence within two years of being on Cal Poly's campus. Most students are unaware they can actually fulfill nearly all requirements for the California PCA exam by completing the plant protection and/or crop science minors. The purpose of this project is to create a streamlined booklet for incoming agricultural science transfer students to follow if they wish to pursue these minors and eventually earn their PCA license through the College of Agriculture, Food and Environmental Sciences.

Background

Upon entry into the agricultural science program the author had a lot of questions as to whether or not this major was the right choice. The department website, at the time, did not advocate the fact agricultural science was primarily agricultural education, agriculture industry or agricultural communications. The author began reaching out to the Agricultural and Environmental Plant Sciences (AEPS) Department and contemplating a department transfer. Then the author discovered minors AEPS has to offer and how they cover most courses needed for the California PCA examination (The HCS Minors: Plant Protection & Crop Science).

The California Department of Pesticide Regulation oversees licensing for PCA's, part of which includes the educational requirements. According to the DPR, "The courses listed are those that the DPR felt best complemented a PCA's typical scope of work and met the requirements of Section 6550 of the California Code of Regulations which describes the PCA minimum education qualifications." For Cal Poly, the courses fall into subcategories which include: Physical and Biological Sciences, Crop Health,

Pest Management Systems and Methods and Productions Systems. Each subcategory has a minimum required number of units that must be completed before the applicant is deemed “qualified” to take the PCA examination.

Once the necessary courses have been completed, the applicant must fill out the licensing packet outlining these courses that have been taken and submit any and all official transcripts. The DPR responds via. mail notifying the applicant if they are qualified, then the applicant checks the exam schedule to locate the next available time and location of an examination. According to the DPR, “You must pass the Laws, Regulations, and Basic Principles examination (including Integrated Pest Management) and at least one pest control category examination with a score of 70 percent or higher (FAC section 12022).” Each category is an additional fee and must be completed if the PCA wishes to perform recommendations in that area. Once the test is completed, the PCA is required to uphold continued education hours during the time in which he/she holds the license. An approved list of courses can be found on the DPR’s website.

As the Environmental Protection Agency continues to tighten regulation of pesticide use throughout California and the rest of the United States, the degree of difficulty and demand for the PCA increases greatly. The importance of education becomes evident when dealing with matters of public and environmental safety. Out of a study of 615 PCA’s in the State of California, approximately 52% reported they had earned a bachelor’s degree (Hallett, 217). The author started to examine all necessary courses in order to obtain these minors and outline the number of units that should be taken/when the courses are offered to aid students in the future. Through mixed methods of research incorporating elements of both qualitative and quantitative approaches (2018). The author sought out professors Dr. David H. Headrick and Dr. Wyatt Brown who were responsible for overseeing the requirements necessary for completion.

Methodology

In order to align/accomplish one’s career goals with the necessary Cal Poly course requirements, he/she must have a solid understanding of what classes to take in order to expedite the

graduation process. The benefit of this project is that it eliminates a majority of questions that arise when attempting to correlate the correct class courses with those required to take the California PCA examination. To complete this project the author first acquired a list of courses required to complete both minors (plant protection and crop science). The author then organized the materials by analyzing when courses were listed as being offered from Cal Poly's Course Catalog located at www.coursecatalog.calpoly.edu.

The author included a breakdown of what the minors entail along with when the specific courses are offered. Once the final layout was completed, the author created a booklet using a free software design program, Canva. Working with the Agricultural Education and Communication Department (AGED), the author chose the size and layout needed to make the booklet most useful. Upon review by peers and colleagues, hard copies are to be delivered and dispersed by the head of the Allan Hancock Agricultural Department, professor Alfredo Koch to prospective transfer students interested in attending Cal Poly and pursuing their PCA. In addition, the AGED staff and faculty can utilize the booklet as a tool in transfer student recruitment efforts and with other community colleges.

The benefit of this booklet will be to aid students regarding the many questions that arise when determining minors to pursue, department directors to speak with, courses to enroll in, and the pitfalls of some courses that are only offered one quarter out of the year. Once edited and formally printed, the final product should aid in the success of the incoming transfer student while reducing their time spent at Cal Poly.

Results

The project has shed light on the various aspects surrounding the logistics of implementing a booklet to the general public while on a budget. While cost to print these booklets from a third-party source remained relatively high, the content did in fact help users. One prospective transfer student's response was that, "the booklet helped me determine what courses I should take and how to lay them out

to finish them in time for graduation. I feel (if I can keep a copy) it will really help me achieve both minors within the 2-year window I'm shooting for". As the booklet becomes more readily accessible to users the author hopes to maintain these results, paving the way for those who wish to become PCA's through the AGED department. The author discovered the process of formatting the booklet became more of a hurdle than previously expected. With help from the department the project was able to properly align the pages and print "in-house" through AGED for demo booklets, which in turn, brought the cost down to nothing. Overall the results achieved seemed positive and are what the author intended.

Conclusion/ Discussion/ Implications

In closing, the author discovered how difficult it can be to actually implement and distribute a project such as this. Proper networking and help from the right staff are crucial when printing/formatting. While the booklet itself is complete, further feedback from prospective students will be the true testament as to the overall success of the project. If students can gather any knowledge and streamline their time at Cal Poly through the use of this booklet, then the author's project solution will have proved successful.

Other considerations leading into the future is the fact that this project was designed around the 2017-2019 catalog. The 2020 catalog differs slightly in that some more classes are required. It seems as though the "individualized route" has been removed going into 2020 which, although is nothing of great importance, alters the overall path the student pursues. The take home message is essentially the same and the information is still 100% relevant, the student just might need to make slight adjustments to his/her schedule. Overall, the project has combined various sources of information in an easy to follow booklet allowing students to gain a better understanding for what courses need to be completed before graduating Cal Poly and obtaining their PCA license.

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