

Palomar College ACR Technology Advisory Committee Meeting Minutes

Spring Semester Current Courses:

ACR 101; Air Conditioning, Heating, and Refrigeration; Mechanical (2 classes)

ACR 102; Air Conditioning, Heating, and Refrigeration; Electrical (2 classes)

ACR 103; Air Conditioning, Heating, and Refrigeration; Heating

ACR 105; Refrigerant Management and Recovery

Air Conditioning, Heating and Refrigeration program is designed to provide students with the knowledge and hands-on learning skills in the air conditioning and refrigeration industry: applications of theory, principles, and techniques will include system components and their interrelated functions, safety, procedures, tools, and equipment; proper testing and evaluation skills to trouble shoot and perform repairs as required. The program also provides retraining and upgrading of skills for maintenance technicians, including EPA certification.

May 11, to May 15, 2020; Via Phone

The Palomar ACR Technology Advisory meeting was later than usual this year due to unprecedented shut down of Palomar College and virtually all business and outside human contact due to the Corona Virus Pandemic. Following strict government and school regulations, I elected to have phone conversations with the business and industry members to cover as much of the meeting agenda as possible within the new constraints.

I discussed with each member of the Advisory Board the school events that had transpired so far this semester, mid-march classes were cancelled and we quickly switched to an on-line, distance learning model to go as far as possible with the lecture portion of the course. I discussed that in addition to the standard instructional PowerPoints, handouts, videos, pictures, etc. I had creating 23 YouTube video's to assist students in the two main basic courses (ACR 101 Mechanical and ACR 102 Electrical) to help students visualize the lab portion of our HVAC courses.

Palomar is working to provide these critical lab courses in late July and early August if allowed by the State of CA. If labs cannot be allowed, students will be given an excused absence and a full refund on the courses. If lab courses are allowed, strict guidelines will be put in place and the instructors will do their best to fully educate the students in a compressed time frame including a Final Exam and a course grade.

Palomar will not be offering any 2020 Summer classes in ACR. Those programs that are offering Summer classes will be fully online. There is also question as to whether the ACR programs will be allowed for the Fall Semester, all is dependent on State authorization.

With the several equipment and parts vendors, we discussed student tool purchases, discounts, and approval to review the job boards in the stores for future employment. They will also contact me directly with any information regarding employment or additional training opportunities when they hear about them so I can pass this information along to students. We discussed obtaining updated tools and some recent equipment that is newly state of the art (VRF Systems, Low NOx Furnaces) and possible future Perkins Grants that could help us purchase these units for our lab and integration into the curriculum.

I am also now on the email chain from these vendors notifying me of upcoming training events, tool deals, etc. that I can pass along to students.

With the contractor vendors that I spoke with, we discussed ways to better communicate job openings the contractors had or would have in the future. We discussed having the contractor representatives coming into the classes at pre-scheduled times and days to give 30 minute talks on their companies, what they are looking for in an installer or service technician, approximate entry level pay, etc. In exchange, I will steer students to their companies when they have graduated from our basic programs. The contractors were all in agreement that the prospective employees they are looking for have the basics of electrical and mechanical systems but that we work hard to ensure they have this knowledge memorized and they are ready to apply it on the job. Employers stated they have been successful starting students as entry level service techs, installation helpers, and shop helpers and equipment expeditors. They continue educating the students that apply themselves and slowly move them up the pay and responsibility ladder. A few contractors again expressed need for basic sheet metal skills and asked if we could integrate that learning into the curriculum. We are going to further discuss this via email and shop visits to determine the best way to accomplish this. We will discuss what basics are needed, how best to teach this, and tools and materials that will be needed. I will need to look for funding to accomplish this.

We further discussed integrating Low NOx furnaces into our program as they are becoming mandatory types of furnaces to be used when replacing an existing furnace or installing a new one. There are slight differences in these furnaces that would be good for entry level techs to know. Same with VRF Systems, contractors are starting to install these systems and will require technicians with knowledge and capabilities on these. We discussed factory certifications needed for this equipment and I will need to

do more homework with the vendors who sell this equipment as to what is needed for certification.

Contractors also stressed that prospective employees need to be EPA Certified before applying for employment or the contractors are very limited as to what kind of work they can use the students for. They would rather not hire them if they are not EPA Certified.

An email was sent to all attendee's thanking them for their participation and that I would be following up with them in the next semester regarding visits to classrooms to discuss their companies and employment.

Attendees:

Chair – Barry Valentine
Assistant Professor ACR Technology
Palomar College
1140 West Mission Road
San Marcos, CA 92969
760-744-1150 ext. 8335

Tim Lowe
Action Air Conditioning, Heating and Solar
130 Bosstick Blvd.
San Marcos, CA 92069
Tim.low@actionac.net

Jason Lynch
Sterling Mechanical, Owner
760-822-3216
www.sterlingairsd.com

Ernie Caro
Sales
Johnstone Supply
900 S. Andreasen
Escondido, CA 92029
760-746-9746
erniec@buyjohnstone.com

Frank Lopez
Branch Manager
National Vent
2426 Auto Parkway
Escondido, CA 92081
760-317-5606
frank@nationalvent.com

Rafael Delgado
DLG Heating & Air Conditioning Corp.
7380 Bignell Drive
San Diego, CA 92139
dlgheatcool@gmail.com

Gustavo Chavez
CA Kitchen Exhaust
639 10th Street, #5
Imperial Beach, CA 91932
619.203.5318
hoods@californiakitchenexhaust.com