

Palomar College  
Drafting Advisory Committee Meeting Minutes  
12 December 2018

**Committee Members**

Luke Hausherr, San Diego PCB, Inc.

Ira Henderson, Quality Cabinet- Glen Reider

Greg Metzger, Enstrom Mold & Engineering

Daniel Enriquez, Hughes Circuits, Inc.

John Perez, General Atomics Aeronautical Systems, Inc.

Paul Taubman, Nine Dot Connects

James McMillen, General Atomics Aeronautical Systems, Inc.

Joan Shaefer, Josephson, Josephson-Werdowatz & Associates, Inc.

Judy Warner, Altium Inc.

Art Gerwig, Palomar College

Anita R. Talone, Palomar College

**I. Call to Order**

Anita R. Talone called the meeting to order at 3:35 p.m.

**II. Welcome, Introductions, and the Role of the Advisory Committee**

Welcome and introductions were made along with an explanation of the purpose of the committee, and the importance and value of them guiding us to be up to industry standards. Members Were thanked for their willingness to serve on the committee.

**III. Approval of Minutes**

A copy of the previous minutes to review and approve will be sent to the committee.

**IV. New Business/ Palomar College Updates**

**a. Restructuring of Funding** – Anita shared the new structure for which the college receives funding; 1/3 of money will come from certificate, AS, and AA degree completions, 1/3 will come from enrollment fees, and another 1/3 will come from financial aid. It is important that we award certificates and AS degrees. We need to encourage students to consider earning several certificates and also the AS degree. We have been working on Guided Pathways to help students stay on course. We also posted a two-year plan on our web page of what is being offered and when, so students are able to plan out their schedules in advance.

Enrollment in our department is up. The South center is slower with enrollment. Anita believes with the support of our Advisory Committee members, our new

DT/ENGR 226 & 227 instructor Paul Taubman, and with proper promotion, we can grow the DT/ENGR 226 & 227 Printed Circuit Board Design classes in the South Center. There is a high demand from employers for students with this skill set, and it is important to offer these courses. Members let us know that in 10 years 50% of Printed Circuit Board Designers will be retired. There is a great need to have classes to create a new workforce for this industry.

We have a new full time instructor in our Drafting Department, Arthur Gerwig. He is a Mechanical Engineer, who transferred from the Physics and Engineering Department. We hope to bring more stem topics into drafting.

**b. Strong Workforce Dollars**

We received approximately \$2.1 million in Strong Workforce money. These funds are being allocated for the HVAC program at the Escondido Center and expansion of the Welding program at the main campus. We have outgrown our classrooms, and are in need of updated facilities.

**c. Perkins**

We will have approximately \$500K-\$600K funding from Perkins. The committee discussed eligible requests as opposed to requests that are not allowed. Currently we are not in need of any new equipment.

**d. Review of Class Offerings, Existing & Proposed AS Degrees and Certificates**

- Computer Assisted Drafting
- Drafting Technology – Technical
- Electro-Mechanical Drafting & Design
- Drafting Technology – Multimedia

We are in need of reviewing and updating our curriculum and certificates, as well as adding a few much needed classes to the program. The committee felt the names of our certificates do not correlate to what they search for when hiring. The committee reviewed the existing AS Degrees and certificates and went through the materials provided, including copies of existing certificate and AS degree requirements, course descriptions and some proposed changes. A few keys points were discussed:

- A new certificate of 8 units entitled “3D Media Training, Simulation and Visualization” was approved by the committee.
- A new certificate, and name change of “Electro-Mechanical Drafting” (of undetermined units) was approved by committee. One suggested new class for the certificate was “Industrial Material’s Process and Product Design” It

was further discussed to add a Robotics class to the certificate/curriculum. Art brought several circuit boards and a robot as examples of what could be built in that class. Exact number of classes and titles to be determined. The MATH required class choices were heavily discussed among all members.

- It was suggested by the committee that a 1 or 2 unit “Introduction to Design and Manufacturing” class be added to all certificates in which students would be introduced to all technology disciplines we offer. It would be required for all students receiving degrees or certificates.

#### **e. Labor Market/Recruitment of PCB (Printed Circuit Board) Students**

The committee noted there is a high demand for PCB designers. More than 50% of the industry workforce is retiring, and there is a lack of suitable trained employees to fill the positions. Students need to be shown, and exposed to the job opportunities in this field. Anita said there is not enough marketing, or exposure, and no one knows the program exist, or what it is. The committee suggested a field study class with field trips to expose students to the industry, and potential jobs. Judy warner, from Altium, offer to publicize the classes through her weekly podcast. She offered to meet with us and talk about cutting cost for our software and possible student software for all enrolled students. Several IPC members offered to make flyers and talk up the classes at the next IPC meeting.

### **V. Marketing and Advertising of Drafting Program**

We recently had some videos created for each discipline, and they should be up on our sites soon. Our web site, and word of mouth is mainly all we have for marketing. Our department is in need of more support, and resources to promote our programs. The committee has several suggestions to help with marketing:

- An updated/ appealing web page; they feel our current web page is monotonous and outdated.
- A list of jobs and pay information pertaining to each certificate/ degree on our web page, and outreach material
- A YouTube channel, and use of social media pages
- Marketing through the Del Mar fair show
- Improved Campus tours that showcase our equipment, and show the potential students the hands on work that is being done in the classroom/a demo of what can be created. One of our members and his son came to a campus tour for parents and their college-bound child. They requested the Trades and Industry tour. He said it was an enormous waste of his time. They were walked around, but no one except for Jack in Cabinet & Furniture Technology (CFT), was available to talk to them about the lab. They were expecting to see the shops and talk to the instructors etc. They were also confused by the names of Departments and Buildings. They came to see Industrial Technology thinking they would see a machine shop, but they

were taken to the Trade and Industry building to see CFT. We need to seriously work on the communication of what these tours include, and work on the how we present what we do to potential students. If they can't find us, they can't take our classes.

- A weekly video clip posted to the website of students in the classroom having “fun” designing and creating something.

## **VI. Technology, Equipment and Facility**

We have outgrown our current classroom space and share it with the Architecture and Interior Design Disciplines as well. The old library should be empty by fall the college is working on who will go in there. We are hoping to be considered for this space. The lower level would accommodate the equipment we have. The South Center rooms are too small for us and our equipment unless they renovate.

We are in need of computer systems capable of running our software. Our current computers keep crashing, and we are only given the basic model. We are in need of more powerful computers. The committee agreed that we should be running the software program with computers that can handle the scope of the work that our students do. When the computers crash, it holds up the class and students' progress.

## **VII. Any Other Business**

None.

## **VIII. Adjournment**

The members were thanked and the meeting was adjourned at 5:45pm.