Clean Energy Technology & Entrepreneurship
Advisory Committee Meeting Minutes
Shoreline Community College
1000 Building, Boardroom #1020 & Zoom
10:30am-12:00pm
3/10/2023

In Attendance:

Tamás Bencsik (JTK Engineering)
Ryan Bradt (Puget Sound Electrical JETC)
Dan Luzius (DLR Group)
Gus Williams (Clean Tech Alliance)
Brian Young (Washington State Dept. of Commerce)
Reeves Clippard (A & R Solar)
Alisha Turpin (Artisan Electric and Shoreline Instructor)
Lindsey Virdeh (Shoreline Instructor and Faculty Lead)
Scott Tuttle (Shoreline Instructor)
Guy Hamilton (Shoreline Staff)
Kelly Griffin (Shoreline Staff - Notetaker)

Lindsey welcomed everyone, facilitated introductions, and mentioned the need for a Committee Chair to lead the meetings.

There was a consensus on approving the December 9, 2022, meeting minutes.

Lindsey gave some "asks" and updates:

- Committee Chair is needed to facilitate the committee meetings. Guy mentioned it is a light lift: Discussion about agenda with Lindsey and Guy, and lead through agenda points at the meeting.
- Students are asking for internships and jobs in solar for the summer (8-week internships would be great).
- The purchase of the solar equipment ties labs into coursework for more hands-on learning.
- As a result of committee input, Lindsey will do some high school presentations and an Amazon presentation to increase enrollment.
- Additional input was requested about increasing diversity of Shoreline student body. Some responses:
 materials to community-based organizations; come to south end of Seattle with marketing to Rainier
 Beach, Kent, and specific zip codes; making personal connections; multi-program Navigators making
 connections; funding/partnerships with CTA; career exploration programs.
- NRG 105 Electricity & Jobsite Safety (3-credit class typically offered fall and spring) to possibly bring back (instructor needed).

Program Learning Outcomes Assessment Follow-up

Lindsey re-capped the initial roll out of PLOA discussion from the December meeting. Guy said PLOA is broader than class or course level outcomes. CET has too many program outcomes (10). Some are course level, not program level. Guy said having about five program outcomes will help the college to see if students are achieving the outcomes. Discussion about condensing or removing redundancy followed:

- #1 Remove duplicate word "apply" and outcome also needs to be measurable.
- #2 Combine with #8
- #3 and #6: Combine. Or combine 3-5; or combine 3-6. There is the issue of not being able to do one without doing the others.
- #4 Course level instead of PLO.
- #5 Combine.
- #6 Combine.
- #7 Move to course level outcomes (or combine #6 and #7).
- #8 Combine with #2.
- #9 Suggestion to remove.
- #10 Yes on changes made.

Lindsey will be working with Alisha on NRG 220 as related to Outcome #8 and that will become part of the POAR (Program Outcome Assessment Reports) process, based on new outcomes.

Within the context of work Lindsey is doing with Romina on outcomes assessment, Lindsey asked the committee: "Are there any classes we could potentially remove if they don't teach skills that you need as employers?" For example, from the Curriculum Matrix (not in the PowerPoint):

104, 110, 202, 290 – none of our program outcomes are assessed by those classes.

- 104 a new course.
- Lindsey teaching 110 now. Textbook is out of date. Lindsey is working on whether it is a class we still want to offer. Comments: Broad (could come through in 101 or 104).
- Equity can we create shorter, or more defined pathways to finish sooner to get them working in the field; consideration to absolute needs. (Anticipate discussion about shorter or more defined pathways on agenda of next meeting.)
- 226, Advanced Sketchup to remove from website? Comments: Yes, only foundational knowledge of the 225 class needed.

Lindsey displayed PowerPoint slides about Course Mapping about two track ideas. Will this provide training for skills needed for students to get a job? (5 bullet points, slide 21)

- 1. Solar Photovoltaic Design Track (101, 104, 180, 120, 220, 103, 225 and electives: 200, 181, 217, 218, 160) Issues: classes to potentially bring back or hasn't been taught in a while 105, 123, 223
- Building Energy Analysis and Auditing Track (101, 102, 104, 180, 162, 163, 200, 181, 225 and electives 103, 217, 218, 160)

Issues: no 105 and Krishnan Gowri's recommendation of a new class "Understanding and Application of Building Energy Codes".

Lively discussion ensued about industry-related energy codes changing; the need for energy modeling; marketing one course to incumbent workers who just need one class by clumping into energy modeling; complexity of codes and changing and understanding landscape of where we're working; and policy conversation (relating to finding the answer about a code, code cycles, codes becoming more stringent, etc.).

In response to Lindsey's question on input about the draft of two Tracks, thoughts were shared out as follows and the conversation will continue after Guy and Lindsey discuss the input: Like the building energy analysis piece as related to need for "Energy Modeler" applicants; seeing in solar (adding in storage and backing things up); question of whether there will be jobs in PV Design long term – important for students to see concepts behind it but a solar license alone could be a dead-end career; existing Solar Designers need to understand code and permitting implications of codes on designs.

Lindsey and Guy thanked everybody for their great input.

Adjournment: 12:06pm