**LATTC Applied Science Advisory Committee Meeting**

Thursday October 4, 2018

12:30pm – 2:30pm

Juniper Hall ST 320

**Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Email** | **Organization** |
| Wendie Johnston | LAB Director | wendie.johnston@pasadenabio.org | Pasadena Bio |
| Renee Madyun | Retired Instructor | rmad4@yahoo.com | LATTC |
| Guilda Neshvad | Lab Director | guilda@positivelabservice.com | Positive Lab Service |
| Pamela La Beau | Chief Environmental Compliance Supervisor | pamela.labeau@lacity.org | LA Sanitation |
| Adriene Murphy | Sr. Management Analyst | adriene.murphy@lacity.org | LA Sanitation |
| Leslie Sidio | Lab Manager | leslie.sidio@lacity.org | LA Sanitation / EMD |
| Cash Sutton III | PT Instructor | suttoncash@gmail.com | LATTC |
| Virgil Shields | Instructor | shieldv@faculty.laccd.edu | LATTC |
| Kenneth Jeong | Management Analyst | kenneth.jeong@lacity.org | City of LA / LA Sanitation |
| Joe Haworth | Chair | joehaworth@thinkearth.org | Think Earth Foundation |
| Michael Lawson | Electrical Tech | mlawson@lacsd.org | LA County |
| Keith Johnson | President | kjohnson@chemprolab.com | Chem Pro Laboratory |
| Pat Yost | Tech Director | pyost@chemprolab.com | Chem Pro |
| Hans Lee | Instructor | leeH3@lattc.edu | LATTC |
| Martin Diaz | Instructor / Department VChair | diazM@lattc.edu | LATTC |
| Miguel Moreno | Instructor/ Department Chair | morenoMA@lattc.edu | LATTC |
| Rachael Harper | Instructor | harperrv@lattc.edu | LATTC |
| Manual Acosta | Instructor | acostam2@lattc.edu | LATTC |
| Larry Frank | President | frankLB@lattc.edu | LATTC |
| Arineh Arzoumanian | Dean of Instruction | arzouma@lattc.edu | LATTC |
| Terri Quenzer  (joined by phone) | Statewide Director & Sector Navigator | tquenzer@sdccd.edu | San Diego Miramar College |

**Agenda:**

***Welcome and Introductions***

* President Frank welcomed everyone to LATTC and thanked them for their time and interest in our programs
* Participants introduced themselves and expressed their interest in our programs

***Program Progress Report***

Dr. Harper, Chemical Technology instructor, led the discussion providing an overview of the modifications made to Chemical Technology, Process Technology, and BioTechnology programs. Students’ pathway begins by enrolling in three courses which are common across three certificates to gain fundamental knowledge of sciences.

* New Core Courses for CTE Programs/Cohorting
  + Reduced unit load for two of three programs
    - Chemical Technology, 47 units 🡪 38 units
    - Process Technology, 45 units 🡪 38 units
    - Biotechnology, 33 units 🡪 34 units
  + Introduced an Industry Exploration component
  + All students required to complete course work in Industrial Safety, Regulatory/Validation and Biomanufacturing
  + Decreased expected time to completion from 2 years to 1.5 years
* Introducing Stackable Certificates for Core Competencies

\*Please see attached chart for more details

**Discussion and Questions:**

Will these pathways allow students to transfer to 4-year biomanufacturing programs? 4-year schools are morphing their programs to meet community college, we need to make sure we are moving into the same direction.

* Core/fundamental courses in all three certificates are in fact transferable. Faculty will work on articulation and transferability of the rest.

Why isn’t transferable Organic Chemistry course included in the programs?

* Idea is to provide basic skills to students and teach them how to apply foundational concepts. Students don’t need to have pre-requisites since all courses are contextualized and applied.
* We plan on allowing students to substitute transferable courses if they wish to replace.

Fundamental Physics concepts should be integrated in courses. While Process Technology includes a Physics course as a required course, Chemical technology could provide it as option – elective course.

***Curriculum and Course Review***

* **Process Technology curriculum updates** 
  + [PRPLTEK 104](http://ecd.laccd.edu/CC_Sheet.aspx?ID=228348&VersionID=3&Entry_ID=719961) - Industry Exploration and Safety

Added a 5 hour lab component focused on general industry skills (calibration, cGMP) and Industry presentations/site visits

* + [PRPLEK 214](http://ecd.laccd.edu/CC_Sheet.aspx?ID=229594&VersionID=4&Entry_ID=719973) - Industry Trends: Employment and Regulations

Incorporated course content from Chem Tech 141 – Basic Employment Skills

* **Proposed Stackable Certificates**

1. Industry Safety, Regulatory and Biomanufacturing (11 units)

* PRPLTEK 104 – Industry Exploration and Safety (4)
* PRPLTEK 214 - Industry Trends: Employment and Regulations (3)
* Biotech 10 – Introduction to Biomanufacturing (4)

1. Applied Science CTE Core Competencies (20 units)

* PRPLTEK 104 – Industry Exploration and Safety (4)
* PRPLTEK 214 - Industry Trends: Employment and Regulations (3)
* Biotech 10 – Introduction to Biomanufacturing (4)
* Chem 51 – Introductory Chemistry (5)
* Bio 003/005 – Introductory Biology (4)

Partners present in the meeting supported these two new certificates. Idea is to make sure these courses provide core competencies they need to succeed in earning certificates and degrees. Group agrees certificates outlined above does that!

***Industry Partner Participation and Support***

A large component of the PRPLTEK 104 course is industry site visits. Would like to request tours for our new students to explore industry pathways and the job opportunities a Chem Tech, Biotech or Process Tech certificate would open for them.

* Allows students to understand different job functions in Industry prior to selecting a certificate focus and embarking on certificate specific courses.
* Invigorates students focus on their selected career pathway and motivates developing a deep understanding of course material as they have had a chance to see how they would apply this knowledge in their future career.
* Have a cohort of 15 students this semester completing site visits or receiving on site industry presentations

***Feedback and Future Directions***

* It will be useful to offer courses in the afternoon/evening.
* City of LA / Sanitation requires students to have transferable courses.
* We will follow up with partners to receive more detail version of sample job descriptions in order to make sure our curriculum includes courses that will prepare students adequately.
* Some students will be shy about asking for guidance? What do you do to advise students?
* LATTC offers pathway specialized advisement to students
* Advisement is integrated into the curriculum. In PT 104, instructor work with individual students to make sure they complete their educational plan. Also, industry visits are part of the curriculum which gives students ample opportunity to get familiar with the industries and explore their interests.
* There is demand for qualified technicians and we need to work more closely with our partners to prepare students.

**One Major theme emphasized by everyone in the group**

Industry partners – private sector – are not concerned about credentials, they hire based on how qualified and prepared students are for a given job. Companies provide the training in house. Thus, are interested in students who are ready to learn.

**Required skills across the board: Soft Skills**

Communication skills: oral and written

Make sure to have students write reports and present their findings in every single class. They will prepare them to be able to communicate with clients.

Prepare students for job interviews

Public sector – different from private; need to make sure students’ have the math and physics skills to pass tests for job placements.

***Closing Remarks/Next Steps***

Group supports the proposal of two new certificates & modifications made to the existing Chemical, Process, and Bio Technology programs.

We will continue our conversations with all partners.

