Student Learning Outcomes Committee Approved Minutes

March 27, 2023| 2:30 PM | Room 2450

This meeting is in-person in Room 2450.

Call to Order at 2:24 pm — John Rosen

Review and Approval of Agenda — John Rosen
Graham/McElderry/Approved

Review and Approval of Minutes — John Rosen
(March 13, 2023)
Graham/McElderry/Approved

Public Comment (This time is reserved for members of the public to address the SLO Committee. Please limit comments to three minutes. In accordance with the Brown Act, the SLO Committee cannot discuss or act on items not on the agenda.)

Reports

- Chair's Report — John Rosen

> He attended PR Committee Meeting, will cover this later.

> FLEX Day SLO sessions debrief

- Lots of program-specific questions
  (One example: Part-timers only teach every other year, so faculty coordinator has them assess for all – works well, systematic way)
- Programs w/ lots of degrees & certs (e.g., 10) cause a bit of stress
- May 1st reminder then, will remind again via email soon (John has had a few come in since then; he/Liz will post these on webpage)
- Liz: Attendee Tim A. inquired about basic SLO training. John can speak with him 1:1 about this. Handbook is a good resource too.
  > Idea: Next FLEX Day (Fall 2023): Here's how to write an SLO, make it measurable, etc.
- Jennie: Let's keep an assets folder (for 3-Year Plan archives) on the webpage /talk to Tim Druley about this.

- Administrator's Report — Stuart McElderry

> There's been lots of talk about CNET Meta per the 3 committees he's on. VP Whalen said [at a CC meeting] how curriculum will be more closely tied to SLOs –the standards indicate this.

- Exercise: Draw a circle, put Curriculum at 12:00, SLOs at 4:00, Program Review at 8:00. Middle: "CNET Meta." This illustrates the continuous cycle. It's exciting to see how it all connects.
- PR Committee: Tinkering with the idea of *equity work* focus on campus and maybe pausing Program Review for a year (noting faculty fatigue). Not possible to set it down entirely /need update.

LAS POSITAS COLLEGE

LPC Mission Statement

Las Positas College is an inclusive, learning-centered, equity-focused environment that offers educational opportunities and support for completion of students' transfer, degree, and career-technical goals while promoting lifelong learning.

LPC Planning Priorities

- Establish a knowledge base and an appreciation for equity; create a sense of urgency about moving toward equity; institutionalize equity in decision-making, assessment, and accountability; and build capacity to resolve inequities.
- Increase student success and completion through change in college practices and processes: coordinating needed academic support, removing barriers, and supporting focused professional development across the campus.

SLO Committee Quorum:

Voting Members:
John Rosen (SLO Chair; BSSL) - P
Liz McWhorter (SLO Support) - P
Kimberly Burks (Student Services) - P
Jennie Graham (STEM) - P
Stuart McElderry (Dean, BSSL) - Z*
Karin Spirn (A&H) - P

Guests: Dan Cearley (in-person)

**Participating via Zoom*

CSLO Reviews

Dan Cearley presenting.
> Background /Rationale for LPC's proposed AMT program:
- City College of SF had a partnership w/ SFO, but the lease got suspended. KW used to work at CCSF, had the idea for LPC to pick it up /we're close to an airport
- Dan mapped all AMT programs in CA (Solano, College of Alameda, Gavilan, Sac); Cuesta on Central Coast
- Planned out of CTE office /mimicking College of Alameda – We can share faculty and/or students w/ them
- He got tapped to do this because he got FAA-certified for drones.
- AMT is prescriptive (FAA has the textbooks /students don't have to buy them) /consistent across the country
- AMT degrees are not just for planes; LLNL hires AMT grads because they work on any engine /electronics.
- It's a recognized trade throughout the world (domestically & internationally).
- Size of College of Alameda's AMT: 1 instructor for 25 students; move as a cohort
- First course will be offered at LPC in the Summer.

> Some of these SLOs might change, e.g., whittle down to 3 (vs. 5).

AMT 50 (Success in Aviation Maintenance Technology)
Upon completion of this course, the student should be able to:
1. Explain ~~Articulate~~ the range of career opportunities for aviation mechanics within and beyond the core industry.
2. Demonstrate fluency in safety techniques, mindsets, and practices.
3. ~~Utilize critical thinking, task-analysis, trouble-shooting, and problem solving techniques and skills.~~ Discuss trouble-shooting and problem solving techniques

Committee Comments:
- Karin felt that some SLOs/items were really broad (e.g., critical thinking)
- Chair: "Problem solving techniques" to what end?
- *Per Dan: Or what is the most appropriate tool to use in a given situation?*
- Chair: Describe different approaches…
- Kim: We may also want to bring safety to the program level (could be PSLO #3)

AMT 52 (Basic Science of Aviation Maintenance Technology)
Upon completion of this course, the student should be able to:
1. Calculate resistance and current and voltage in electrical circuits.
2. Explain the processes of servicing batteries.
3. Interpret ~~Read~~ schematics ~~and troubleshoot circuits~~.
4. Describe the process needed for ~~Accomplish~~ corrosion control on aircraft.

AMT 52L (Basic Science of Aviation Maintenance Technology Laboratory)
Upon completion of this course, the student should be able to:
1. Utilize critical thinking, task-analysis, trouble-shooting, and problem solving techniques and skills to troubleshoot circuits.
2. ~~Calculate resistance and current and voltage in electrical circuits.~~
3. Service batteries.
4. ~~Read schematics and troubleshoot circuits.~~
5. Perform ~~Accomplish~~ corrosion control on aircraft.

Committee Comments:
- Per Chair: #1: Skill to do what? Is #1 redundant?

AMT 54 (Survey of Aviation Maintenance Technology)
Upon completion of this course, the student should be able to:

1. Evaluate systems as per FAA documentation.
2. ~~Apply systems knowledge to actual aircraft systems.~~
3. Define airworthy standards for ~~sixteen~~ all aircraft systems.

Committee Comments:
- Jennie: Maybe #s 1 & 3 stay in the lecture, #2 goes to the lab?

AMT 54L (Survey of Aviation Maintenance Technology Laboratory)
Upon completion of this course, the student should be able to:

1. ~~Evaluate systems as per FAA documentation.~~
2. ~~Demonstrate an ability to~~ Apply systems knowledge to actual aircraft systems.
3. Identify ~~Define~~ airworthy standards for ~~sixteen~~ all aircraft systems.

Committee Comments:
- What are the sixteen aircraft systems? (*Dan will check on this.*)
- Kim: Is this quality assurance? *Per Dan: Yes.*
- Karin: And assess? (*Dan will check.*)

AMT 60 (Airframe Systems I)
Upon completion of this course, the student should be able to:

1. Evaluate systems as per FAA documentation.
2. Demonstrate an ability to apply systems knowledge to actual aircraft systems.
3. Define airworthy standards for seven aircraft systems.

Committee Comments:
- And what are the seven aircraft systems?
  > Maybe just list them out (vs. numbering them)
  > *Dan is checking on this*.

AMT 60L (Airframe Systems I Laboratory)
Upon completion of this course, the student should be able to:

1. Evaluate systems as per FAA documentation.
2. Demonstrate an ability to apply systems knowledge to actual aircraft systems.
3. Define airworthy standards for seven aircraft systems.

AMT 62 (Airframe Systems II)
Upon completion of this course, the student should be able to:

1. Demonstrate an ability to apply systems knowledge to actual aircraft systems.
2. Evaluate systems as per FAA documentation.
3. Demonstrate technological literacy with regards to course content.
4. Define airworthy standards for seven aircraft systems.

Committee Comments:
- Again, are these seven different aircraft systems?
- Jennie: Should it be 8 and 8, or a total of 14 (vs. 16)?
  > Maybe just list them out (vs. numbering them)
  > *Dan is checking on this*.

AMT 62L (Airframe Systems II Laboratory)
Upon completion of this course, the student should be able to:
1. Demonstrate an ability to apply systems knowledge to actual aircraft systems.
2. Evaluate systems as per FAA documentation.
3. Demonstrate technological literacy with regards to course content.
4. Define airworthy standards for seven aircraft systems.

AMT 64 (Airframe Systems III and Review)
Upon completion of this course, the student should be able to:
~~1. Analyze aircraft systems for compliance with airworthiness standards.~~
2. Formulate methods for repairs through critical thinking and problem solving.
~~3. Demonstrate skills required to complete repairs to acceptable manufacturers and FAA standards.~~

AMT 64L (Airframe Systems III and Review Laboratory)
Upon completion of this course, the student should be able to:
~~1. Analyze aircraft systems for compliance with airworthiness standards.~~
~~2. Formulate methods for repairs through critical thinking and problem solving.~~
3. Demonstrate skills required to complete repairs to acceptable manufacturers and FAA standards.

Committee Comments:
- Per Chair: #3 needs to be rewritten.
- *Per Dan, yes – he will add more specifics.*

AMT 70 (Theory of Powerplants I)
Upon completion of this course, the student should be able to:
1. Explain the operation of aircraft reciprocating and turbine engines
~~2. Disassemble and assemble an aircraft powerplant~~
~~3. Repair and inspect aircraft engine ignition, instruments, lubrication, engine fuel and engine cooling systems.~~

AMT 70L (Theory of Powerplants I Laboratory)
Upon completion of this course, the student should be able to:
~~1. Explain the operation of aircraft reciprocating and turbine engines~~
2. Disassemble and assemble an aircraft powerplant
3. Repair and inspect aircraft engine ignition, instruments, lubrication, engine fuel and engine cooling systems.

AMT 72 (Theory of Powerplants II)
Upon completion of this course, the student should be able to:
~~1. Inspect components that are part of aircraft powerplant systems~~
~~2. Repair components within an aircraft powerplant system~~
~~3. Overhaul and install apparatus that are part of aircraft powerplant systems~~

Committee Comments:
- Jennie: Everything in 72 looks like it should be in the lab portion. Also, she suggests that Dan reach out to the folks who teach the lecture vs. lab [at College of Alameda] and see what is actually taught/done in both.

AMT 72L (Theory of Powerplants II Laboratory)
Upon completion of this course, the student should be able to:
1. Inspect components that are part of aircraft powerplant systems
2. Repair components within an aircraft powerplant system
3. Overhaul and install apparatus that are part of aircraft powerplant systems

AMT 74 (Advanced Powerplants I)
Upon completion of this course, the student should be able to:
1. Inspect, repair, troubleshoot, and install aircraft propeller systems.
2. Repair and inspect turboprop systems, helicopter powerplants, auxiliary powerplants, and turbine engines.
3. Utilize critical thinking, task-analysis, trouble-shooting, and problem solving techniques and skills.

AMT 74L (Advanced Powerplants I Laboratory)
Upon completion of this course, the student should be able to:
1. Inspect, repair, troubleshoot, and install aircraft propeller systems.
2. Repair and inspect turboprop systems, helicopter powerplants, auxiliary powerplants, and turbine engines.
3. Utilize critical thinking, task-analysis, trouble-shooting, and problem solving techniques and skills.

AMT 76 (Advanced Powerplants II)
Upon completion of this course, the student should be able to:
1. Demonstrate technological literacy for aviation powerplants.
2. Identify and troubleshoot large aircraft ignition systems and power distribution systems.
3. Install, overhaul, inspect and repair gas turbine engines and turboprop engines and auxiliary power units.

AMT 76L (Advanced Powerplants II Laboratory)
Upon completion of this course, the student should be able to:
1. Demonstrate technological literacy for aviation powerplants.
2. Identify and troubleshoot large aircraft ignition systems and power distribution systems.
3. Install, overhaul, inspect and repair gas turbine engines and turboprop engines and auxiliary power units.

AMT 80 (Aviation Maintenance Technology Test Preparation)
Upon completion of this course, the student should be able to:
1. Prepare in part for the oral, practical and written portions of the general, powerplant, and airframe sections of the Federal Aviation Administration Aircraft Mechanics test.
2. Demonstrate fluency in all sections of the general, powerplant, and airframe sections of the Federal Aviation Administration Aircraft Mechanics test.
3. Apply common test taking strategies to improve exam scores.

Final Thoughts:
- Dan will revise these and plan to present for a Second Reading at the 4/10 SLO Committee Meeting.

PSLO Reviews

Dan Cearley presenting.
- Summer 2024 is the earliest start for the one beginning course; Fall 2024 full launch.
- CTE Manager is creating a business model. They visited Cuesta College. They are creating a Bay Area AMT consortium. They are also seeking funding -- Cuesta got money from FAA & other industry partners.
- The facility itself gets certified by the FAA.

Committee Comments:
- Kim: So there is nothing in San Mateo County?
  > *Per Dan – No (there used to be West Valley); we're bridging the East Bay - South Bay - Sac gap.*
- Per Karin: Where do the classes meet?
  > *Per Dan: Labs will be at Livermore airport, and lectures at LPC.*

AMT AS Degree Airframe
Upon successful completion of the AMT AS Degree Airframe, students will be able to:
1. ~~Student will interpret and assess aircraft systems as to airworthy condition. Student will demonstrate an ability to maintain these aircraft systems.~~ Student will apply their knowledge of systems to evaluate ~~FAA publications as to~~ airworthy standard and document ~~will be completed to~~ per FAA standards.
   **Assess, maintain, evaluate*
2. ~~Prepare for personal, educational and/or career goals.~~ Demonstrate the skills necessary to pass the FAA Airframe exam.
3. ~~Perceive, understand, and engage in verbal and nonverbal communication.~~
4. ~~Understand and demonstrate personal, civic, social, environmental responsibility and cooperation in order to become a productive local and global citizen.~~

Committee Comments:
- Chair: The first one has multiple outcomes, need to separate
- Jennie: Are these for different courses /would all be assessed?
- *Per Dan: #1 is very common throughout all courses. #2 is similar.*
- *Per Dan: One is trained to read the manual from the factory (e.g., Boeing) & FAA manual too.*
- #2: Per Karin & Kim, you really do this in any program. Per Jennie: AMT 50 speaks to this one. Per Kim, this is actually like an SAO.
- The same changes should apply to the AS Powerplant.
- Per Jennie: You should double-check PSLO/CSLO mapping.
- Jennie: If there's GE for these degrees, they could be covered in those courses (*Dan: public speaking*). If 1&2 cover the essence of the degree, you do not need the rest.
- #4: Sounds like an institutional statement. And per Chair: No CSLOs that map to it.
- Per Kim: Major-specific GE – CMST 11 (Intercultural Comms) could cover it.
- Per Chair: It's really cumulative.
- Per Karin: How do you assess this?
- *Per Dan: These SLOs are right off of College of Alameda's CORs.*

AMT AS Degree Powerplant
Upon successful completion of this program, students will be able to:
1. Student will interpret and assess aircraft systems as to airworthy condition. Student will demonstrate an ability to maintain these aircraft systems. Student will apply their knowledge of systems to evaluate FAA publications as to airworthy standard. Maintenance record recording will be completed to FAA standards.
2. Prepare for personal, educational and/or career goals.

3. Perceive, understand, and engage in verbal and nonverbal communication.
4. Understand and demonstrate personal, civic, social, environmental responsibility and cooperation in order to become a productive local and global citizen.

AMT Certificate of Achievement: Airframe Technician
Upon successful completion of this program, students will be able to:

1. Student will interpret and assess aircraft systems as to airworthy condition. Student will demonstrate an ability to maintain these aircraft systems. Student will apply their knowledge of systems to evaluate FAA publications as to airworthy standard. Maintenance record recording will be completed to FAA standards.
2. Prepare for personal, educational and/or career goals.
3. Perceive, understand, and engage in verbal and nonverbal communication.
4. Understand and demonstrate personal, civic, social, environmental responsibility and cooperation in order to become a productive local and global citizen.

AMT Certificate of Achievement Powerplant Technician
Upon successful completion of this program, students will be able to:

1. Student will interpret and assess aircraft systems as to airworthy condition. Student will demonstrate an ability to maintain these aircraft systems. Student will apply their knowledge of systems to evaluate FAA publications as to airworthy standard. Maintenance record recording will be completed to FAA standards.
2. Prepare for personal, educational and/or career goals.
3. Perceive, understand, and engage in verbal and nonverbal communication.
4. Understand and demonstrate personal, civic, social, environmental responsibility and cooperation in order to become a productive local and global citizen.

Discussion Items

- **Program Review & SLOs** John Rosen & SLO Committee Members
  -SLO Chair attended the PR meeting and shared proposed revisions to the SLO section with Program Review
  - How many program review writers feel overwhelmed by the SLO section-- anything we can do to help with that?
    - *Suggestion: When PR holds a workshop, an SLO rep should be there.*
  > They also want to make the PR template shorter. Any thoughts from the SLO team?
    - Could we model previous years' PR's? Link to some programs' sections so they can see how programs are doing this (e.g., 3-5?). How can I get useful data? Include one from Student Svcs. Under C. SLOs/SAOs "For assistance with these questions"→ Examples (hyperlink) next to C1,2,3
    - Make a webpage (vs. just linking to PDFs) /update that – John/Liz will work w. Tim D. on this.
  - Note: FLEX proposal is due right before Program Review is due.
  - *Karin: She used to have PR office hrs. /she'd invite SLO Chair too, sit for 1-2 hrs.* JR: Let's do it!

Informational Items

Liz McWhorter, John Rosen

- **CSLOs for KIN 1 (Sports Nutrition)**
  Note: This is a new, cross-listed course [cross-listed with NTRN 5].

  NTRN 5: Sports Nutrition
  A. Upon completion of NTRN 5, students will communicate nutrition information using credible resources.
  B. Upon completion of NTRN 5, students will be able to analyze and evaluate dietary intake relative to government guidelines and recommendations for athletes.
  C. Upon completion of NTRN 5, students will describe the basic principles of nutrition as they relate to sports performance.

- **3-Year SLO/SAO Plans due**
  May 1st: Please email your completed 3-Year Plan template to John or Liz. Thanks in advance!

- **SLO Coaching**
  By appointment, via Zoom or in-person (Contact John or Liz)

- **Friday SLO Talks**
  April 14 @ 10a-12p: Canvas – Documenting Student Learning
  Free Registration: **Zoom Meeting Registration Link**

Good of the Order
Adjournment by John Rosen at 4:30 pm
Next Regular Meeting: April 10, 2023 (Rm 2450)