



LPC Mission Statement

Las Positas College is an inclusive learning-centered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

LPC Planning Priorities

- ❖ Implement the integration of all ACCJC standards throughout campus structure and processes.
- ❖ 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

Members:

Ann Hight (Chair)

Kristina Whalen

Amir Law

Angelo Bummer

Susan Cumbo

Daniel Cearley

Jennie Graham

Robin Rehagen

Mike Schwarz

Madeline Wiest

Approved Agenda

1. Call to Order
2. Review and Approval of Agenda (November 25th, 2019)
3. Review and Approval of Minutes (October 28th, 2019)
4. Public Comments (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 act on these items.)
5. eLumen Instructions for SLO Coordinators Ann Hight
6. Curriculum Mapping Ann Hight
7. CSLO Review
 - a. New Business
 - i. APIW 51: Blueprint Reading I
 1. Upon completion of APIW 51, the student will be able to identify the various line types used on blueprints.
 2. Upon completion of APIW 51, the student will be able to identify the three primary views shown on a typical blueprint.
 3. Upon completion of APIW 51, the student will be able to interpret dimensions found on a typical blueprint.
 4. Upon completion of APIW 51, the student will be able to describe information found in the title block of a blueprint.
 - ii. APIW 52: Shop Ironworkers Mathematics
 1. Upon completion of APIW 52, the student will be able to convert inches to feet and inches dimensions.
 2. Upon completion of APIW 52, the student will be able to demonstrate adding and subtracting feet and inches using a tape line.
 3. Upon completion of APIW 52, the student will be able to demonstrate using a calculator to solve right triangle problems.
 4. Upon completion of APIW 52, the student will be able to demonstrate finding missing parts of a right triangle when two items are known.
 - iii. APIW 53: Welding Technology
 1. Upon completion of APIW 53, the student will be able to describe unsafe welding practices found on a job site or place of employment.
 2. Upon completion of APIW 53, the student will be able to demonstrate selection of the proper SMAW electrodes based on the position and base metal.
 3. Upon completion of APIW 53, the student will be able to demonstrate preparation and fit up of weld joints.
 4. Upon completion of APIW 53, the student will be able to demonstrate proper usage of AWS welding symbols.
 - iv. APIW 54: Structural I
 1. Upon completion of APIW 54, the student will be able to evaluate structural steel shapes for size, weight and grade of material.
 2. Upon completion of APIW 54, the student will be able to demonstrate inspecting beam ends for squareness prior to fit up.
 3. Upon completion of APIW 54, the student will be able to layout and fit columns based on primary views shown on typical blueprints.
 4. Upon completion of APIW 54, the student will be able to demonstrate flame straightening or cambering of structural members.

- v. APIW 55: Work Place Safety and Machinery Operation/Labor Studies I
 - 1. Upon completion of APIW 55, the student will be able to demonstrate using proper personal protective equipment and safe practices used to maintain a safe work place.
 - 2. Upon completion of APIW 55, the student will be able to identify the safe capacity for using power machinery.
 - 3. Upon completion of APIW 55, the student will be able to describe the purpose and benefit of collective bargaining to the union and the employer.
 - 4. Upon completion of APIW 55, the student will be able to describe what constitutes a reasonable grievance.
- vi. APIW 56: Structural II
 - 1. Upon completion of APIW 56, the student will be able to demonstrate the layout and fabrication of a jig used in truss fabrication.
 - 2. Upon completion of APIW 56, the student will be able to demonstrate the set up and use of a transit.
 - 3. Upon completion of APIW 56, the student will be able to demonstrate preparation of column ends for full penetration welding.
 - 4. Upon completion of APIW 56, the student will be able to demonstrate selection and use of drill bits and taps from a tap and drill chart to tap holes in metal.
- vii. APIW 57: Structural III
 - 1. Upon completion of APIW 57, the student will be able to demonstrate the use of geometry in the layout of patterns and templates.
 - 2. Upon completion of APIW 57, the student will be able to demonstrate layout of templates and sweeps used for brake and roll formed plates.
 - 3. Upon completion of APIW 57, the student will be able to demonstrate use of dimensional properties to lay out pipe joints and connections.
 - 4. Upon completion of APIW 57, the student will be able to demonstrate layout of irregular shaped steel objects using the triangulation method.
- viii. APIW 58: Welding Code/AISC/Metallurgy/Labor Studies II
 - 1. Upon completion of APIW 58, the student will be able to demonstrate a working knowledge of AWS D 1.1 Structural Code for steel.
 - 2. Upon completion of APIW 58, the student will be able to demonstrate a working knowledge of AISC Code of Standard Practices.
 - 3. Upon completion of APIW 58, the student will be able to demonstrate preparation of structural steel for painting work.
 - 4. Upon completion of APIW 58, the student will be able to explain the AWS code requirements for qualification of welders and welding operators.
- ix. APIW 59: Metal Stairs Layout and Fabrication
 - 1. Upon completion of APIW 59, the student will be able to demonstrate proper use of tools and equipment used for stair fabrication.
 - 2. Upon completion of APIW 59, the student will be able to identify various component parts of a stair that are necessary to layout and assemble a stringer.
 - 3. Upon completion of APIW 59, the student will be able to demonstrate mathematical calculations used in stair layout and fabrication.
 - 4. Upon completion of APIW 59, the student will be able to demonstrate preparation of stairs for galvanizing.
- x. APIW 60: Metal Railing Layout and Fabrication
 - 1. Upon completion of APIW 60, the student will be able to demonstrate assembly of a cutting list, from a blueprint, of pipe used for handrail.
 - 2. Upon completion of APIW 60, the student will be able to demonstrate the proper use of tools to prepare pipe parts for fit up and welding.
 - 3. Upon completion of APIW 60, the student will be able to demonstrate layout of sloped handrails for stairs.
 - 4. Upon completion of APIW 60, the student will be able to demonstrate the proper finishing technique used for welded joints.
- xi. APIW 61: Ornamental Metal Fabrication/Structural IV

1. Upon completion of APIW 61, the student will be able to identify nonferrous metals used in architectural metal fabrication.
 2. Upon completion of APIW 61, the student will be able to identify component parts of a power break.
 3. Upon completion of APIW 61, the student will be able to demonstrate use of air forming dies for bending metal.
 4. Upon completion of APIW 61, the student will be able to calculate stretch out lengths for bending angular and radial bends in a power brake.
- xii. APIW 62: Blueprint Reading II
1. Upon completion of APIW 62, the student will be able to identify vertical, horizontal and diagonal members of a building structure.
 2. Upon completion of APIW 62, the student will be able to demonstrate interpretation and use of elevation plans for steel structures.
 3. Upon completion of APIW 62, the student will be able to demonstrate identification and use of steel members on floor, roof and foundation plans.
 4. Upon completion of APIW 62, the student will be able to demonstrate detailing of simple square frame floor beams from structural steel design drawings.
- xiii. AUTO A9: Light Vehicle Diesel Engines
1. Upon completion of AUTO A9, the student will be able to diagnose electronic diesel system.
 2. Upon completion of AUTO A9, the student will be able to repair diesel engine mechanical systems.
 3. Upon completion of AUTO A9, the student will be able to diagnose and repair diesel turbo systems.
- xiv. AUTO C1: Automotive Service Consultant
1. Upon completion of AUTO C1, the student will be able to communicate to customers using verbal, written and electronic means.
 2. Upon completion of AUTO C1, the student will be able to perform basic automotive visual inspections.
 3. Upon completion of AUTO C1, the student will be able to utilize labor time guides and parts estimate guide to provide estimates.
- xv. GEOL 2: Historical Geology with Lab
1. Upon completion of GEOL 2, students will be able to evaluate and/or interpret geologic diagrams encapsulating geologic histories (sequences of events).
 2. Upon completion of GEOL 2, students will be able to define and identify the geology of divergent, convergent and transform plate tectonic environments.
 3. Upon completion of GEOL 2, students will be able to evaluate and interpret geologic diagrams encapsulating geologic histories (sequences of events).
- xvi. RADS 40A: Radiation Safety
1. Upon completion of RADS 40A, the student will be able to identify the basic principles of atomic energy, radioactivity, and decay.
 2. Upon completion of RADS 40A, the student will be able to assess hazards associated with the use of ionizing radiation.
 3. Upon completion of RADS 40A, the student will be able to determine biological effects and risks from radiation exposure.
- xvii. RADS 40B: Emergency Response & Monitoring
1. Upon completion of RADS 40B, the student will be able to identify proper instruments for characterization of radiological conditions.
 2. Upon completion of RADS 40B, the student will be able to evaluate data from radiation measurement equipment.
 3. Upon completion of RADS 40B, the student will be able to identify and be familiar with emergency response resources at the federal, state, international, and industry levels.
- xviii. RADS 40C: Safety Controls & Regulations
1. Upon completion of RADS 40C, the student will be able to identify appropriate waste disposal processes.
 2. Upon completion of RADS 40C, the student will be able to describe requirements for safe transportation of radiological materials.

3. Upon completion of RADS 40C, the student will be able to determine pathways for radiological transport in the environment and sampling strategies.
- xix. VWT 1: World Wines: New World
 1. Upon completion of VWT 1, the student will be able to compare and contrast "old world" wines/"new world" wines geography, history and evolution.
 2. Upon completion of VWT 1, the student will be able to describe the basics of the sensory evaluation of wine including olfactory, palate, objective and subjective approaches to tasting.
 3. Upon completion of VWT 1, the student will be able to list the predominate grapes and notable producers from the leading American wine producing regions.
- xx. VWT 2: World Wines: Old World
 1. Upon completion of VWT 2, the student will be able to compare and contrast "old world" wines/"new world" wines geography, history and evolution.
 2. Upon completion of VWT 2, the student will be able to describe the basics of the sensory evaluation of wine including olfactory, palate, objective and subjective approaches to tasting.
 3. Upon completion of VWT 2, the student will be able to list the predominate grapes and notable producers from the leading French wine producing regions.
- xxi. VWT 23: Fundamentals of Wine Science
 1. Upon completion of VWT 23, the student will be able to explain wine composition and list the chemical families found in grapes and wine.
 2. Upon completion of VWT 23, the student will be able to describe how wine chemistry impacts a wine's color, aroma, flavor, balance, stability and quality.
 3. Upon completion of VWT 23, the student will be able to outline the process of the primary fermentation.
 4. Upon completion of VWT 23, the student will be able to identify the important chemical compounds found in wine.
- xxii. VWT 55: Wine Service and Sales
 1. Upon completion of VWT 55, the student will be able to describe the many models and concepts of the wine hospitality industry.
 2. Upon completion of VWT 55, the student will be able to design, organize and care for a wine list.
 3. Upon completion of VWT 55, the student will be able to explain the roles of aperitifs, cordials and other spirits in the dining experience.
8. PSLO Review
 - i. Actor's Conservatory Certificate of Achievement
 1. Upon completion of the Certificate of Achievement in Actors Conservatory, the student will be able to integrate an understanding of the history of theater and theatrical text into performance using character construction, physicality and vocal nuance.
 - ii. Automotive Mechanical
 1. Upon completion of the Certificate of Completion in Automotive Basic, the student will be able to diagnose engine mechanical issues.
 2. Upon completion of the Certificate of Completion in Automotive Basic, the student will be able to measure engine components and compare to specifications
 3. Upon completion of the Certificate of Completion in Automotive Basic, the student will be able to tear down, inspect and reassemble engines
 - iii. Cloud Computing Certificate of Achievement
 1. Upon completion of the Certificate of Achievement in Cloud Computing, the student will be able to host a database and run queries using an interface from a commercial provider and run a file-server service using a provider of their choice.
 2. Upon completion of the Certificate of Achievement in Cloud Computing, the student will be able to design, build and deploy cloud based solutions.
 - iv. Engineering AS
 1. Upon completion of the AS in Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.

2. Upon completion of the AS in Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Engineering, the student will be able to use a variety of technological tools to solve engineering problems.
- v. Engineering Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an engineering-related problem.
 2. Upon completion of the Certificate of Achievement in Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
 3. Upon completion of the Certificate of Achievement in Engineering, the student will be able to use a variety of technological tools to solve engineering problems.
- vi. Electrical Engineering AS
1. Upon completion of the AS in Electrical Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
 2. Upon completion of the AS in Electrical Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Electrical Engineering, the student will be able to use a variety of technological tools to solve electrical engineering problems.
- vii. Electrical Engineering Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Electrical Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
 2. Upon completion of the Certificate of Achievement in Electrical Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the Certificate of Achievement in Electrical Engineering, the student will be able to use a variety of technological tools to solve electrical engineering problems.
- viii. Electrical Engineering UC Pathway AS
1. Upon completion of the AS in Electrical Engineering UC Pathway, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
 2. Upon completion of the AS in Electrical Engineering UC Pathway, the student will be able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Electrical Engineering UC Pathway, the student will be able to use a variety of technological tools to solve electrical engineering problems.
- ix. Electrical Engineering UC Pathway Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an electrical engineering-related problem.
 2. Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, the student will be able to set up appropriate laboratory equipment, collect and analyze electrical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the Certificate of Achievement in Electrical Engineering UC Pathway, the student will be able to use a variety of technological tools to solve electrical engineering problems.
- x. Civil/Mechanical Engineering AS
1. Upon completion of the AS in Civil/Mechanical Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an civil/mechanical engineering-related problem.
 2. Upon completion of the AS in Civil/Mechanical Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Civil/Mechanical Engineering, the student will be able to use a variety of technological tools to solve civil/mechanical engineering problems.

- xi. Civil/Mechanical Engineering Certificate of Achievement
 1. Upon completion of the Certificate of Achievement in Civil/Mechanical Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve an civil/mechanical engineering-related problem.
 2. Upon completion of the Certificate of Achievement in Civil/Mechanical Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze civil/mechanical data, draw conclusions, and clearly communicate results.
 3. Upon completion of the Certificate of Achievement in Civil/Mechanical Engineering, the student will be able to use a variety of technological tools to solve civil/mechanical engineering problems.
- xii. Mechanical Engineering UC Pathway AS
 1. Upon completion of the AS in Mechanical Engineering UC Pathway, the student will be able to apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
 2. Upon completion of the AS in Mechanical Engineering UC Pathway, the student will be able to set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Mechanical Engineering UC Pathway, the student will be able to use a variety of technological tools to solve mechanical engineering problems.
- xiii. Mechanical Engineering UC Pathway Certificate of Achievement
 1. Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, the student will be able to apply fundamental principles from mathematics, science and engineering to solve a mechanical engineering-related problem.
 2. Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, the student will be able to set up appropriate laboratory equipment, collect and analyze mechanical engineering data, draw conclusions, and clearly communicate results.
 3. Upon completion of the Certificate of Achievement in Mechanical Engineering UC Pathway, the student will be able to use a variety of technological tools to solve mechanical engineering problems.
- xiv. Shop Ironworkers Apprenticeship AS
 1. Upon completion of the AS in Shop Ironworkers Apprenticeship, the student will be able to operate safely in an ironworker shop environment.
 2. Upon completion of the AS in Shop Ironworkers Apprenticeship, the student will be able to demonstrate AWS code quality welding.
 3. Upon completion of the AS in Shop Ironworkers Apprenticeship, the student will be able to demonstrate the ability to read and interpret blueprints used in the ironworker shop.
 4. Upon completion of the AS in Shop Ironworkers Apprenticeship, the student will be able to demonstrate the ability to layout and fabricate steel stairs and handrail.
 5. Upon completion of the AS in Shop Ironworkers Apprenticeship, the student will be able to describe the benefits derived from collective bargaining and union membership.
- xv. Shop Ironworkers Apprenticeship Basic Certificate of Achievement
 1. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Basic, the student will be able to identify the basic line types used on an blueprints.
 2. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Basic, the student will be able to calculate material lengths base on tapeline measurements.
 3. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Basic, the student will be able to demonstrate using a calculator to solve right triangle problems.
 4. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Basic, the student will be able to demonstrate the skills needed to perform AWS Code quality welding in the flat position.
 5. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Basic, the student will be able to identify essential components of being a valuable ironworker employee.
- xvi. Shop Ironworkers Apprenticeship Elementary Certificate of Achievement

1. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Elementary, the student will be able to identify common structural shapes used on an blueprints.
 2. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Elementary, the student will be able to demonstrate layout of basic structural columns and base plates.
 3. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Elementary, the student will be able to demonstrate fit-up and preparation of beam ends intended for complete joint penetration.
 4. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Elementary, the student will be able to demonstrate the skills needed to perform AWS Code quality welding in the horizontal position.
 5. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Elementary, the student will be able to operate safely in a shop Ironworker employment environment.
- xvii. Shop Ironworkers Apprenticeship Intermediate Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Intermediate, the student will be able to identify tools used for layout of patterns and templates.
 2. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Intermediate, the student will be able to demonstrate layout of flat plates, drill bushings and angle templates.
 3. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Intermediate, the student will be able to demonstrate fit-up and preparation of pipe and rolled sections.
 4. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Intermediate, the student will be able to demonstrate the skills needed to perform AWS Code quality welding in the vertical position.
 5. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Intermediate, the student will be able to identify various non-destructive tests that are utilized to check welds for soundness.
- xviii. Shop Ironworkers Apprenticeship Advanced Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Advanced, the student will be able to explain the AWS code requirements for the qualification of welders and welding operators.
 2. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Advanced, the student will be able to demonstrate torque inspection of high strength steel bolts and fasteners.
 3. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Advanced, the student will be able to demonstrate visual inspection of welded materials for weld soundness and discontinuities.
 4. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Advanced, the student will be able to demonstrate preparation of structural members for painting work.
 5. Upon completion of the Certificate of Achievement in Shop Ironworkers Apprenticeship Advanced, the student will be able to explain how building loads are distributed into the ground through the use of footings.
- xix. Smog Technician
1. Upon completion of the Certificate of Completion in Automotive Smog, the student will be able to apply and take the California Smog test.
 2. Upon completion of the Certificate of Completion in Automotive Smog, the student will be able to diagnose emission issues.
 3. Upon completion of the Certificate of Completion in Automotive Smog, the student will be able to diagnose engine mechanical issues.
- xx. Software Engineering AS
1. Upon completion of the AS in Software Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.
 2. Upon completion of the AS in Software Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
 3. Upon completion of the AS in Software Engineering, the student will be able to use a variety of technological tools to solve software engineering problems.
- xxi. Software Engineering Certificate of Achievement
1. Upon completion of the Certificate of Achievement in Software Engineering, the student will be able to apply fundamental principles from mathematics, science and engineering to solve a software engineering-related problem.

2. Upon completion of the Certificate of Achievement in Software Engineering, the student will be able to set up appropriate laboratory equipment, collect and analyze software data, draw conclusions, and clearly communicate results.
3. Upon completion of the Certificate of Achievement in Software Engineering, the student will be able to use a variety of technological tools to solve software engineering problems.

xxii. Technical Theater Certificate of Achievement

1. Upon completion of the Certificate of Achievement in Technical Theater, the student will be able to integrate an understanding of the history of theater and theatrical text or design into the execution of designs and projects of their own making.

9. Reports

a. Chair's Report

Ann Hight

b. Administrative Report

Kristina Whalen/ Amir Law

10. Good of the Order

11. Adjournment

12. Next Regular Meeting (Monday, December 9th, 2019)