

San Luis Obispo County Community College District Educational Master Planning

Role of the Educational Master Plan in the SLOCCCD Integrated Planning Cycle

As shown in the graphic on the next page, the educational and facilities master plans are long-term plans in the SLOCCCD Integrated Planning Model. As such, these plans compare existing conditions to the SLOCCCD mission and, based on that comparison, identify current strengths and weaknesses, and project the future challenges and needs of the District.

Long-term master planning is based on District-wide dialogue about the future. The steps in this dialogue are:

1. Analysis of
 - The effectiveness and outcomes of the previous master plans;
 - Current state and national trends in higher education;
 - Current internal and external conditions; and
 - Ten-year projections of demographic changes.
2. Based on these analyses,
 - Project the District's overall growth rate for the coming decade;
 - Identify current and anticipated challenges; and
 - Develop Institutional Goals that convey the District's response to these identified challenges.
3. Analyze the current status of each instructional discipline and student service and project the anticipated growth rate of each relative to District-wide growth.
4. Based on these analyses and projections related to the educational master plan, develop a facilities master plan that will remodel or add to the facilities needed to support current and anticipated changes in the district's programs and services.

These analyses are documented in this educational master plan and the corresponding facilities master plan.

The Institutional Goals set during the development of the educational master plan will guide the allocation of District energies and resources for the next decade by serving as the basis for the short-term planning processes (strategic plan, Institutional Planning and Program Review, and operational plans). Through this process, the master plan and the short-term plans are linked to the mission:

Mission → Data analysis to assess the District's effectiveness in meeting the mission → Identification of challenges → Institutional Goals → Institutional Objectives

CHEMISTRY

Chemistry is the study of the atoms and molecules that comprise the building blocks of the world, which leads to a greater understanding of materials, medicine, engineering, forensics, environmental science, geology, molecular biology, agriculture and other related fields. Coursework in this discipline prepares students for transfer to four-year institutions or for employment in health and technical careers.

The Chemistry Program consists of 11 degree-applicable credit courses intended to meet three types of student goals:

- Introductory chemistry for beginning science and nursing and allied health majors;
- General chemistry for science and engineering majors; and
- Organic chemistry for science majors and students who intend to earn professional health degrees at medical, pharmacy, or veterinary schools.

Ten of the degree applicable courses transfer to CSU, and of these, six also transfer to UC.

Students may complete specific Chemistry courses to fulfill the following degree and transfer requirements:

- Physical and Life Sciences general education requirement for the SLOCCCD associate degree;
- Area of emphasis requirements for the SLOCCCD associate of arts degree in Liberal Arts – Science;
- Scientific Inquiry and Quantitative Reasoning general education requirement for CSU transfer; and
- Physical and Biological Sciences general education requirement for UC transfer.

Students may earn a SLOCCCD Associate of Science degree with a major in Chemistry.

Data

	Discipline Size: FTES	Efficiency: FTES/FTEF District-wide Target = 15.00	Demand: Fill Rate	SLOCCCD CHEM Successful Course Completion	Statewide CHEM Successful Course Completion
DISTRICT-WIDE Fall 2012	3,716	14.54	83%		
CHEMISTRY Fall 2012 Total	140	18.72	102%	72%	69%
- North County	22	12.98	90%	76%	
- SLO	118	20.39	104%	71%	
DISTRICT-WIDE Fall 2014	3,530	13.84	82%		
CHEM Fall 2014 Total	136	18.08	93%	64%	67%
- North County	15	12.58	92%	77%	
- SLO	121	19.14	93%	63%	
Target: Fall 2020	143	19.00	90%	69%	
Target: Fall 2025	150	19.00	90%	69%	

Discipline Size: Relatively medium size; 51 to 150 FTES

Comparing 2012 and 2014, the amount of Chemistry FTES earned at the North County and SLO Campuses remained the approximately the same. Chemistry courses were not offered at the South County Center or online.

Efficiency: Strong

The efficiency of Chemistry courses exceeded the District-wide target for both the discipline total and the courses taught at the SLO Campus. Efficiency was below the District-wide target at the North County Campus in both 2012 and 2014.

Demand: Strong

The demand for Chemistry courses remained consistently high in 2012 and 2014, significantly exceeding the SLOCCCD fill rate in the same time period.

Student Outcome: Strong

The overall successful course completion rates for Chemistry courses were slightly above the statewide rate in 2012 and slightly below the statewide rate in 2014. The student successful course completion rates for Chemistry courses were higher at the North County Campus than at the SLO Campus in both 2012 and 2014. In 2012, the successful course completion rates at the SLO Campus was slightly higher than the statewide rate for Chemistry courses, and in 2014, the rate at the SLO Campus was below the statewide rate.

Growth Projection: Same as the SLOCCCD growth rate

Challenges

- Need large capacity classrooms for lecture so that laboratory sections can be combined into single lectures to maintain or improve efficiency
- Offer Chemistry via distance education to improve student access