CAL MARITIME

ANNUAL PROGRAM REPORT

Academic Program	Marine Transportation
Reporting for Academic Year	2019-2020
Department Chair	Daniel M. Weinstock
Date Submitted	11/30/2020

1. SELF-STUDY (about 1 page)

A. Five-year Review Planning Goals

The last department program review was completed in the Fall of 2016. The 2016 program review included the following specific recommendations:

Faculty:

- Rebuild the department tenure density in response to past and projected retirements. The department should hire at least three new tenure track faculty in the coming years.

- The department recommends that faculty starting salaries be increased and that the Marine Vocational Instructor track be reopened.

- A policy should be developed concerning the conversion from the MVI to the professor track.

Academic Advising Training and Manual: The MT department should produce an Academic Advising Manual, including Frequently Asked Questions, as a resource for advising guidelines and information. In addition, formal training should be conducted for new and current Academic Advisors in the department.

Assessment Plan: The department should complete its revision of a formal internal assessment review program, including the adoption of any changes and needed modifications for emerging new assessment criteria or new elements of the program to include.

STCW Program: The department should complete its revision of the STCW assessment program.

Simulation Program Review: The department should complete its review of the simulation courses and ensure that the scenarios and course material are up to date and appropriate for meeting the learning outcomes of the courses and the program. Dynamic position, Cyber Security, Ice Navigation, and Autonomous Shipping courses should be added to the program.

Simulation Equipment Refresh: The department should work with the Director of Simulation to update the simulation equipment in the Simulation Center and aboard the training ship.

B. Five-year Review Planning Goals Progress

Faculty:
- An assistant professor was hired in Fall 2019. Two additional tenure-track position were authorized for this following year. The department has recently had a number of tenured faculty resign, retire and/or die. The recent revolving door of faculty will hurt the program. Tenure track hires will bring stability. Although we have made progress much more is needed.

- The Marine Vocational Instructor track was not reopened. However, the minimum requirements for an assistant professor were changed to broaden the pool of eligible candidates.

Academic Advising Training and Manual:
- The MT department Academic Advising Manual, including Frequently Asked Questions, has been regularly updated.

Assessment Plan:
- The assessment plan in response to WASC recommendations is under development. A new MT capstone course will be part of the curriculum in Spring 2022.

STCW Program:
- The STCW assessment program is in place and is under contiguous review and revision. However, a robust electronic tracking system is needed to track ALL of the paper work involved with the STCW program including the changes made downstream when assessments are moved.
- Among other things a dedicated shore-based Life Boat Davit system is needed (see example from MPT Fort Lauderdale. Florida).

Simulation Equipment Refresh:
- Extensive simulation upgrades are ongoing in the Simulation Center.
- The Dynamic Positioning (DP) simulator has been funded and the equipment is being installed. The Program will be Nautical Institute certified. The California State University Maritime Academy will be one of the only US Maritime Universities with an internationally certified program.
- A refresh of the TSGB bridge simulator is needed
- The TSGB radar lab needs a renewal (apparently this equipment has been ordered and will be installed prior to cruise(s) 2021.
- Simulation program review has started, and several improvements have been completed. This should be an ongoing project.
- The Dynamic Positioning course is scheduled too be delivered for the first time this Spring 2021.

Maritime Management Program:
- The department has been working with the Department of International Business and Logistics to develop a joint program. The findings will be submitted to the Provost at some point in the future.

School of MT/IBL/NS: Completed. The school is in place.

Marine Transportation Curriculum Review and Revision Committee was formed and meet on a regular basis. The entire revision was submitted, and the 2021 Road Map was approved by the Provost.

C. Program Changes and Needs

The university recently decided to conduct only one training cruise per year instead of two. this may have resulted in a significant reduction in our enrollment. The Marine Transportation program could be grown by admitting more students. However, the faculty from the department recognize that the program is expensive. The University is planning to make two cruises during Summer 2021. This is primarily because of the issues arising form COVID-19.

An ad hoc MT curriculum review and revision committee has been formed. Our goals are to: reduce the number of units, find efficiencies within the curriculum, eliminate courses that no longer meet the needs of the program or are in excess of what is required, to modernize the curriculum, and to create a Transfer Curriculum.

The above was all accomplished except for the Transfer Curriculum. This is still being worked on by the department.

A formalized Transfer Curriculum will more than likely attract additional new students who otherwise may be reluctant to spend the extra year as a student.

Due to recent retirements, resignations, deaths, and the nature of our program, hiring of replacement tenure-track faculty should be accelerated. Salaries for both Lecturers and tenure line faculty must be increased which in turn will increase the applicants pool and help retain new faculty.

A course on Autonomous Shipping is under consideration. We are awaiting funding of the required equipment to outfit one of the academy's new small vessels with the required equipment. Once the equipment is installed the course will be offered.

2. SUMMARY OF ASSESSMENT (about 1 page)

A. Program Student Learning Outcomes

MT PLO 1: Discipline-Specific Knowledge: Graduates will demonstrate competence in the concepts and technologies of international marine transportation.

MT PLO 2: Leadership and Teamwork: Graduates will demonstrate the ability to work effectively as a leader and member in professional teams.

MT PLO 3: Communication: Graduates will demonstrate effective communication skills.

MT PLO 4: Ethical Awareness: Graduates will use ethical reasoning to make decisions related to the maritime industry.

MT PLO 5: Quantitative Reasoning: Graduates will demonstrate the ability to analyze numerical data.

MT PLO 6: Information Fluency: Graduates will define a specific need for information; then locate, evaluate, and apply the needed information.

MT PLO 7: Critical and Creative Thinking: Graduates will analyze problems in new and different ways.

B. Program Student Learning Outcome(s) Assessed

All seven PLO's are assessed every year as they align with the assessment requirements for maintaining the program's Standards of Training, Certification and Watchkeeping for Seafarers (STCW) certification.

C. Summary of Assessment Process

The assessment process is dictated by the United States Coast Guard in accordance with the International Maritime Organization's Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

The rubrics for assessment are standard for all certified programs in the US. The assessments selected represent only a handful of those which are required to be assessed each year in accordance with STCW for every graduate from the MT program. They were selected based on their specific alignment with the PLOs.

There is no sampling strategy needed, as instructors maintain documentation of every student's completion of the assessment and the date on which that student achieved successful completion.

Due to the nature of the STCW requirements, the success with students achieving the PLO's will be nearly 100 percent every year. During the course there may be multiple opportunities to demonstrate competence but if the minimum standard is not achieved by the end of the semester, the student must retake the associated course. As a result, in order to graduate, each student in the MT program must have achieved the standards in all of the PLO's.

A capstone MT course is under development and will also be used to further assess our students. This is a proactive response to WASC recommendations.

D. Summary of Assessment Results

As predicted, the assessment results for all PLOs over the 2019-2020 assessment period shows 100 percent of students successfully met the PLOs. There are a few exceptions to this as a result of the impact of COVID-19. Individuals plans between faculty and the student are being created.

In the last few years, course content has been adapted to allow for individual assessment of each student with room in the curriculum for additional training and reassessment as needed to achieve 100 percent success for all rubrics. The STCW assessment process will be continually adapted to new requirements when required by regulatory bodies, but the STCW rubrics used for PLO assessment are not expected to be revised in the coming years. The use of STCW assessments to assess PLOs will allow for annual assessment of all PLOs with consistent rubrics.

In the coming year we will again assess all seven PLOs. This year marks the first year of program level assessment alignment with STCW assessment, so there is limited ability to mark direct trends in student achievement. The 100 percent standard may not allow for growth in future years, but it does ensure that all outcomes are being achieved by our graduates.

The next step in advancing the assessment data for our program is to identify STCW rubrics for when PLOs are introduced and reinforced. We will also request feedback from the individual instructors, who are the assessors, about the difficulty in achieving successful completion. The analysis will provide information on which of the PLOs may need additional reinforcement in earlier courses. Feedback on the difficulty of achieving successful assessment from each student may be our most useful assessment data moving forward. At this time, quantitative data on number of attempts students are provided is not being tracked. Depending on qualitative data from instructors, it may be a long-term goal to collect this information for program improvement.

3. STATISTICAL DATA

Statistical data is meant to enhance and support program development decisions. These statistics will be attached to the Annual Report of the Program Unit. This statistical document will contain the same data as required for the five-year review including student demographics of majors, faculty and academic allocation, and course data.

Program	2018
A. Students	
1. Undergraduate	285
2. Postbaccalaureate	12
B. Degrees Awarded	83
C. Faculty	
Tenured/Track Headcount	
1. Full-Time	10
2. Part-Time	0
3a. Total Tenure Track	10
3b. % Tenure Track	50%
Lecturer Headcount	
4. Full-Time	3
5. Part-Time	7
6a. Total Non-Tenure Track	10
6b. % Non-Tenure Track	50%
7. Grand Total All Faculty	20
Instructional FTE Faculty (FTEF)	
8. Tenured/Track FTEF	7.48
9. Lecturer FTEF	5.71
10. Total Instructional FTEF	13.19
Lecturer Teaching	
11a. FTES Taught by Tenure/Track	95.33
11b. % of FTES Taught by Tenure/Track	52%
12a. FTES Taught by Lecturer	87.60
12b. % of FTES Taught by Lecturer	48.0%
13. Total FTES taught	182.93
14. Total SCU taught	2,744
D. Student Faculty Ratios	
1. Tenured/Track	12.71
2. Lecturer	14.7
3. SFR By Level (All Faculty)	16.4
4. Lower Division	18.2
5. Upper Division	11.2
E. Section Size	
1. Number of Sections Offered	109
2. Average Section Size	16.4
3. Average Section Size for LD	20.0
4. Average Section Size for UD	14.1
6. LD Section taught by Tenured/Track	9
7. UD Section taught by Tenured/Track	39
8. GD Section taught by Tenured/Track	0
9. LD Section taught by Lecturer	34
10. UD Section taught by Lecturer	27

UPDATED INFORMATION FOR 2019-2020 NOT FOUND ONLINE UNDER THE INSTITUTIONAL RESEARCH SECTION OF THE CAL. MARITIME WEBSITE.