



**Memorandum of Understanding**

This MOU has been read and approved by:

Associate Dean: *Krzysztof Slowinski* Date: 10/31/2024

Dean, College of CNSM : *Curtis Bennett* Date: 11/1/2024  
Curtis Bennett

Interim Vice Provost Academic Programs: *Pei-Fang Hung* Date: 11/1/2024  
Pei-Fang Hung



## **Program Review Summary and MOU**

CNSM Academic Advising  
College of Natural Science and Mathematics  
October 2024

### **Overview of the review process**

According to the self-study, the College of Natural Sciences and Mathematics (CNSM) has a mixed (or split) model for advising. CNSM pre-majors (all freshmen and a large fraction of sophomores) are advised by professional staff advisors in the Academic Advising Center. Fully declared students, including all incoming transfer students, are advised by faculty advisors in academic departments. The self-study provides evidence that this mixed model encourages collaboration between faculty and professional advisors, allowing for the exchange of insights and information to benefit students.

CNSM Academic Advising is integrated with tutoring, peer mentoring, first year learning communities (Beach XP) and with college- and university-based initiatives aimed at fostering inclusive learning environment. This is accomplished by co-locating services in the same space (i.e., Student Access to Science (SAS) Center) as well as by involving academic advisors in all aspects of student support programs. This creates a holistic advising model.

The CNSM Academic Advising has not previously undergone program review as an academic support unit. The Center has however been evaluated by NACADA as a part of campus advising and discussed briefly within the program reviews of CNSM Departments. This will therefore be the first MOU for this program. The self-study was submitted in September 2023, and the external review was conducted by Associate Dean Carmelo Interlando from San Diego State University (SDSU) on February 1, 2024. The report and MOU were reviewed and approved by IPAC on October 16<sup>th</sup>, 2024.

As part of this review, the following documents were reviewed:

1. self-study
2. center website
3. external reviewer report

### **Commendations are noted in the following areas:**

1. Mission, goals, student expectations, advisor expectations, and student learning outcomes (SLOs) are clearly articulated and available on the CNSM advising website. SLOs could have increased specificity. <https://web.csulb.edu/colleges/cnsm/advising/>  
CNSM's comprehensive approach to advising is well aligned with the campus advising policy (PS 10-06) and the broader vision for integrated and holistic student support. The external reviewer noted that *the "organization, including the Associate Dean, faculty advisors, and staff advisors, demonstrated "remarkable cohesion". Moreover, the recent "NACADA's recommendation of ensuring "a consistent student experience for first-time, first-year, and transfer students" is*



*wholeheartedly supported*” by members of CNSM advising community.

2. Professional Development - both faculty and staff advisors have access to the same basic advising training via University Center for Undergraduate Advising (UCUA). All advisors have access to university- wide advising resources and information (via dedicated Canvas site and monthly University Advising Council meetings), training, and communication. They also have access to our Academic Affairs sponsored Advising Institutes, which bring outside speakers to campus on a variety of topics each semester.  
The Dean's Office also organizes an annual retreat attended by staff and faculty advisors, as well as campus partners, focused on exchanging best practices and aligning their respective advising approaches. Both the Academic Advising Center and the CNSM Student Access to Science Center (SAS) are engaged in professional development efforts focused on creating identity safe learning spaces.
3. The CNSM Advising Center has embraced educational equity and inclusive excellence within their advising and student support practices. Advisors participate in a variety of equity-focused initiatives and trainings on campus, and they use inclusive advising practices and language when working with students. CNSM efforts in social-emotional learning and growth mindset, peer mentoring, student resilience programs, programming for first generation students, and other student support efforts received national and CSU-wide recognition. The external reviewer describes an engaging and collaborative atmosphere. In addition, CNSM reps participated in the campus Equity in Advising Roundtables, making several policy recommendations to remove barriers for students’ academic progress. The self-study reports that CNSM has already implemented all recommendations from the Equity in Advising Roundtables group.
4. The split-advising (a.k.a. mixed-advising) model is supported by CNSM administration/faculty/staff, professional colleagues, and by the external reviewer as being effective for the students within the college. About 50% of FTFY students originally admitted to one of the science or math majors eventually graduate in a non-CNSM major. Almost all major-switching occurs before a student declares a major (i.e. within the first 60 units of student's undergraduate career). Advising at this stage benefits from staff advisors knowledgeable in General Education with a strong background in counseling. Once the student moves into the major, faculty have the expertise to advise, guide and mentor students on their academic path towards a degree. As noted by the external reviewer, *“professional staff advisors for pre-majors are trained in exploration strategies and knowledge of general education requirements, helping undecided students navigate initial steps effectively. This frees up faculty time for deeper mentoring with declared students. Faculty advisors can leverage their subject-matter expertise to guide students toward relevant courses, research opportunities, and career paths within their chosen major. Despite the separation of specializations between staff and faculty, the split model is managed in such a way to provide a smooth transition during hand-off. Junior and senior students can still confer with staff advisors for questions related general education, for example.”*
5. The student success metrics (retention and graduation rates) show important progress. The four, five, and six-year graduation rates for CNSM students graduating with any degree have improved significantly from F’09 to F’18 (13.2% → 42.4%), F’09 to F’17 (46.6% → 66.7%), F’09 to F’16 (69.5% → 76%). The four, five, and six-year graduation rates for CNSM students graduating within the CNSM have improved



significantly from F'09 to F'18 (6% → 22.4%), F'09 to F'17 (19.5% → 31.9%), F'09 to F'16 (27.9% → 36.4%). The graduation rates for students who were CNSM majors or pre-majors in their fifth semester since matriculation have improved significantly from F'13 to F'18 for Asian (29% → 51%), Hispanic/Latino (9% → 50%), and White students (21% → 59%). It is worth noticing that the associated equity gaps have been closing. The external reviewer reports that *“the statistics indicate that the organization and its enacted strategies are effective”*.

### Concerns and/or gaps are noted in the following areas:

- Partnerships: The self-study recognizes that *“occasional tensions can arise from campus-wide processes and procedures that may not adequately involve stakeholders, overlook the distinctive needs of STEM students, and occasionally result in unfavorable student success outcomes”*. The external reviewer echoed these concerns and reported that *“faculty and staff advisors advocated for greater involvement in the decision-making process regarding University advising policies and strategies”* and *“in order to ensure a “consistent student experience for first-time, first-year, and transfer students” as recommended by NACADA, the University should create opportunities for increased involvement of the CNSM advising team in shaping advising-related policies and strategies.”*

### Future opportunities for the program are noted in the following areas:

#### 1. Advising staffing and caseloads:

The CNSM advising is well supported, but further augmentation may be desirable. The advising caseloads for both staff advisors and faculty advisors are lower than CSULB average. The administrative and supervisory structure for CNSM advising follows the same model as in several other colleges at CSULB.

- The CNSM student support services include 8 professional staff as follows: 3.75 FTE professional academic advisors, 0.75 FTE Advising and Retention Coordinator, 1.0 FTE Coordinator of Peer Learning, 0.5 FTE Outreach Coordinator, 1.0 FTE Coordinator of Student Research Programs, 0.75 FTE Coordinator of Learning Communities for First Time First Year Students, and 1 FTE Health Professions Advisor.
- Faculty advising: As of Fall 2023 CNSM dedicated approximately 3.7 FTE positions in the form of assigned time or additional summer work compensation for faculty academic advisors. The assigned time is distributed among 3 large academic departments (Biological Sciences, Chemist & Biochemistry, Mathematics & Statistics) proportionally to the number of declared majors; faculty advisors in smaller departments (Earth Science and Physics & Astronomy) receive 3 WTU of assigned time per semester.
- For fall 2023, the CNSM Advising conducted 2,478 appointments while faculty in academic departments conducted 3,354 appointments. Advising appointments for CNSM students range from the average of about 3.5 appointments for new freshmen, sophomores, and transfer students in their first year, to about 1.5 appointments annually for 4th year transfers and 5th/6th year native freshmen.
- The average number of appointments is similar for staff and faculty advisors (when normalized to FTE), hence current staffing results in fewer available appointments for juniors and seniors. The NACADA evaluation of campus advising recommends a maximum caseload of 350, and this



would require an allocation of additional 1.3 FTE or 16 units of assigned time to departmental advising.

2. Assessment of CNSM Advising Program:

It is important for the academic advising program to perform its own direct and indirect measurements to determine how their advising influences student success, and to inform future program development. CNSM Advising already has an assessment plan focused on 6 areas of evaluation, including (1) the effectiveness of CNSM Advising Model based on persistence and graduation data, (2) the systematic assessment of major switching patterns as a function of academic performance, (3) availability and distribution of advising appointments, (4) student perceptions and satisfaction survey, (5) mapping of learning outcomes and institutional expectations, (6) Advisor's individual assessment strategies

The strategies described under area 1), 2), and 4) are already used in "closing the loop" activities. Moreover, CNSM produced several Data Fellows Projects, presentations, and publications in areas 1) and 2).

CSULB student perceptions and satisfaction surveys administered by the University in spring 2022 and 2023 (area 4) showed that the CNSM advisor scores were in alignment with other college and university advisor scores across all areas. Both surveys indicate that CNSM Advising availability and usage of advising services is higher than the campus average. In 2022 Campus Advising Survey: 7.5% of CNSM students reported not using academic advising vs. 11.5% campus average, 35.9% of CNSM students reported using advising 3 or more times during the academic year vs. 30.9% campus average. In 2023 Campus Advising Survey, the percentage of CNSM students not using academic advising has dropped to 5.7% while the percentage of students who participated in 3 or more advising appointments has increased in each category (freshmen, sophomores, juniors, and seniors). The self-study notes that both CNSM and the campus received lower ratings for conveyance of information related to university policies, procedures, and resources. In response to this finding, the CNSM already started development of canvas-based advising modules that could be "pushed" to students as needed.

3. Technology:

Advisors, especially faculty, noted that EAB could be updated to improve navigation. A recurring pain point is the need to re-enter information (in EAB) multiple times, suggesting unnecessary redundancy, and ultimately consuming valuable time for advisors.

4. CNSM Advising has a plan for enhancing advising activities, including

- expand outreach and coordination with local schools. To this end we hired an Outreach Coordinator who also serves as an academic advisor;
- expand the work of our outreach office with a focus on Long Beach College Promise students and students transferring from community colleges;
- expand peer mentoring programs and building early connections between freshmen students and academic departments. We already incorporated soft skills, such as communication, teamwork, and problem-solving, into our student success class but these efforts could expand further.



**It is therefore agreed that the CNSM Advising Center will:**

1. Continue to implement the assessment plan for academic advising in order to complete annual assessments of CNSM Academic Advising student learning outcomes using direct and indirect methods and report on closing the loop activities to illustrate that continuous learning outcome data are used to inform decision-making. In addition to assessment measures described in self-study, CNSM already conducts systematic review of FTFY pre-majors with more than 70 units, considers roadblocks to graduation, and develops strategy to improve course completion. Provide an annual update (due June 1) on progress made towards MOU actions to the CNSM dean, the Vice Provost for Academic Programs, and the Coordinators of Program Review and Assessment. Your review cycle will be from 2023-2030. A comprehensive self-study will be due June 2030 for a 2030-2031 Academic Year review process.
2. Continue to advocate for the for the holistic support needs of CNSM majors within larger contexts and discussions for advising.
3. Consult with appropriate stakeholders to determine how best to mitigate technology “pain points”.
4. In collaboration with campus stakeholders, consider holding a career panel event for each major.
5. Carry through plans for enhanced CNSM advising activities.
6. Engage with appropriate stakeholders in discussions regarding campus-wide advising programs that directly affect the philosophy, structure, operations, evaluation, and accountability of CNSM Academic Advising and Student Support. CNSM will articulate specific requests and needs in these areas and will provide justification for proposed solutions or modifications.

**It is therefore agreed that the College of Natural Sciences and Mathematics and Academic Affairs will:**

1. Actively engage with CNSM and other college advising centers when discussing policies and procedures that affect campus advising. The Associate Dean (AD) and Advising Coordinator for CNSM will be consulted along with other College ADs and Advising Leads when implementing campus-wide advising programs directly affect the philosophy, structure, operations, evaluation, and accountability of CNSM Academic Advising and Student Support. CNSM believes that such campus-wide programs and initiatives should promote the collaboration and holistic integration of services, while recognizing and respecting the diverse needs of CSULB students. The CNSM identified e-advising, SOAR, mandatory advising, training for new advisors, advising calendars and advising holds, nudging and communication with students, as areas in need for further consultation.
2. Continue to support the professional development and growth of the advising staff and faculty.
3. Work with the advising staff to secure necessary resources for Beach XP expansion in the college and SOAR.

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