

COMMITTEE RECOMMENDATION FOR OCEANOGRAPHY

STRENGTHS:

- Two new faculty members were hired in fall 2019.
- 80% of students are supported by research grants or fellowships that generate \$16-20 F&A annually; teaching enterprise is in the black.
- Demonstrated success in placement of MS and PhD graduates.
- Oceanography is among the largest external research grant generating departments at UAF. Many large, on-going research projects on issues vital to Alaska, to the Arctic, to the nation, and to the world; faculty are recognized as international experts on high latitude ecosystems.
- Oceanography faculty drove the building and operation of the *Sikuliaq*; charters bring in more than \$1M annually for UAF, and should continue for the foreseeable future.
- Faculty, students, and post-docs are highly productive in research.
- Faculty contribute to CFOS undergraduate programs, e.g. teach MSL's only undergraduate offering (MSL 111 Oceans).
- Faculty work with the School of Management faculty to offer the Blue MBA, demonstrating a commitment to multidisciplinary.

WEAKNESSES:

- Low enrollment numbers in both the MS and PhD in relation to the number of FTEs.
- Faculty attrition due to retirements and departures to other universities has decreased the size and capacity of the faculty.
- Low student-to-faculty ratio because of the low number of faculty that results in fewer faculty who can write grants to fully support graduate students (see Opportunities).

OPPORTUNITIES:

- The *Sikuliaq* is highly visible and will continue to attract students, faculty, researchers, and others from around the world; department recently acquired the *Nanuq*, a 40-foot vessel at the Seward Marine Center; this will support research and field study courses at Seward and recruit more students.
- The two new hires will increase the number of grants that can be written, and therefore increase the number of graduate students who can be supported; the new hires will also increase class enrollment and recruitment.
- Faculty are committed to increasing asynchronous web-based courses to increase student-to-faculty ratio and class sizes.
- The BS in Fisheries and Ocean Sciences will continue to increase enrollment in their undergraduate courses.
- Offers the only online Professional MS degree in Oceanography; there is demand for this program, especially for working professionals; also true for the Blue MBA, offered jointly with School of Management.
- Stacking courses 400/600 will increase enrollment and class offerings for the Ocean Sciences concentration.

- A possible consolidation of oceanographers within UAF, e.g. from CFOS, IARC, and INE would increase opportunities for collaboration and visibility, concentrate expertise, and increase capacity of the department; thus, a larger and better-equipped program would attract more students and allow the department to take on even more large externally funded research programs.
- Nationally and internationally, there are critical research questions that the department could address, especially on questions related to the Arctic and sub-arctic; the department is ideally situated to address these questions as the state is surrounded by three oceans.

THREATS:

- Financial threats have limited size of faculty and thus student enrollment; number of graduate students is directly related to the number of faculty who can write grants to support them.
- University-supported TAs and scholarships are inadequate to support students. Fully supporting graduate students is very costly.
- Lower faculty number is contracting the ability to write grants, to fund students, etc. is causing UAF's Department of Oceanography to lose its place as the number one leader in high-latitude research and academic programs.

CENTRALITY TO MISSION:

- Oceanography is central to the mission of CFOS and to the UAF.
- The research done by Oceanography faculty and students is critical to the state of Alaska, and indeed, to the entire planet.
- UAF is a Land, Space, and Sea Grant university.

INDICATORS OF QUALITY:

- The *Sikuliaq* came about largely due to the efforts of the Oceanography faculty; the importance of the research that is conducted through this vessel cannot be overstated.
- Oceanography faculty are recognized as leading international experts on high-latitude ecosystems.
- Most faculty grants include funding for students; 80% of students are supported by research grants or fellowships.
- A large percentage of faculty publications include students; faculty have a strong record of presentations and publications.

COST-EFFECTIVENESS:

- Faculty are very successful in attracting external funding; Oceanography is among the largest external research grant generating department at UAF; since 2014, has managed over \$56M (about \$1M per year per PI).
- Because 80% of students are supported by grants that generate \$16-20K of F&A annually per student, the teaching enterprise is in the black.
- The *Sikuliak* generates about \$1M/year in charters, and this revenue source is expected to continue.

	MAJORS	DEGREES
Oceanography MS	FY15: 7 / FY 19: 9	FY15: 3/ FY19: 1
Oceanography PhD	FY15: 9/ FY 19 : 8	FY15: 1/ FY19: 0

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Oceanography MS:

RECOMMENDATION:	ADDITIONAL COMMENTS:	DATE FOR FOLLOW-UP:
Continuation w/ improvement plan (7 votes, 1 vote for continuation)	Investigate low numbers of graduates/time to degree and develop plan to improve. Continue with plans to expand online offerings.	one year

Oceanography PhD:

RECOMMENDATION:	ADDITIONAL COMMENTS:	DATE FOR FOLLOW-UP:
Continuation w/ improvement plan (7 votes, 1 vote for continuation)	Investigate low numbers of graduates/time to degree and develop plan to improve. Continue with plans to expand online offerings.	one year