

Industry Advisory Board Meeting notes
4/27/23

Agenda:

- I. Present revised course outlines and outline for the two certificates.
- II. Vote on approval for courses and certificates.

Advisory Board members:

- Diane Windham – NOAA
- Luke Gardner – UCSD Scripps – Moss Landing
- Janet Kubler – Cal State Northridge
- Linda Chilton – USC Sea Grant
- Marslaidh Ryan – Heal the Bay
- Peter Struffenegger - Urchonomics
- Michael Lee – Cal State East Bay

Santa Monica College:

- Nathan Churches – Lead faculty on Aquaculture in Life Science Department
- Alex Tower – Chair of the Life Science Department
- Katya Rodriguez – Trade and Logistics faculty in Business Department
- Keith Everette – Trade and Logistics faculty in Business Department
- Ferris Kawar – Sustainability Manager and Project Manager on Aquaculture program

- **Peter Struffenegger:** Can an internship be remote?
Alex Tower:
- **Peter Struffenegger:** Seems like curriculum is still geared towards marine applications but many jobs will be in fresh water. For example language regarding larval development could be changed to or include spawning and nursery rearing.
Alex Tower: Agreed

- **Diane Windham:** Is permitting curriculum created in conjunction with state regulators? She is willing to help with this, since she helps the industry navigate this process. Maybe a checklist of who to talk to at an agency and tips on what to consider in the process.
Alex Tower: It's not just about CA permitting, but more general guidance on how to navigate the system. But, yes, we would love the input by our advisors like Diane, Randy and Luke because we recognize this is a very confusing process and its still evolving in CA.
Janet Kubler: Remember that this is just an entry level program.

- **Michael Lee:** Are the lab hours twice what the lecture hours are, like it's done at Cal State and UC?
Alex Tower: No, they are one for one but some of the labs can be done online.

- **Michael Lee:** Can students take classes in the second certificate at the same time or are they built upon each other?
Alex Tower: We saw them as stand-alone courses, instead of built upon each other.
- **Michael Lee:** A twin topic to permitting should be “Certification” in the advanced course
Alex Tower: Agreed. This can be added in.
- **Linda Chilton:** HACCP should be include in the advanced course topics.
Alex Tower: It is.
Linda Chilton: Preventing the introduction or spreading of aquatic nuisance species should also be included in the advanced course.
Alex Tower: Agreed.
- **Luke Gardner:** Is Aquatic Permitting its own course or part of another? Her recommends it be included with entrepreneurial course.
Alex Tower: Because we can't set up courses to be truly interdisciplinary, we need to work with the Business Department faculty on this.
- **Linda Chilton:** Under Aqua 1, use “historical” in place of “indigenous”.
Alex Tower: Agreed
- **Marslaidh Ryan:** 1) Emphasize “restorative”, 2) add to Permitting, process for “collection management” and “collection and release”, 3) What boat would we use? 4) Is SCUBA only open water or is it Science Diving, which would be more valuable.
Alex Tower: We could rent a boat but much of the curriculum will be in-classroom.
Alex Tower: It does not include Science Diving because we are trying to make the basic SCUBA course affordable for students and we can direct them to our partners to get the more advanced, Science Diving certification. We would not be allowed to teach an upper level course anyway.
- **Peter Struffenegger:** We should include the transportation of species in the advanced course. In addition, address the concerns of animal rights advocates.
Luke Gardner: Students need to understand why protocols are in place and why they need to be followed (even when no one is watching).
Nathan Churches: Yes, this is our intention to include.
- **Michael Lee:** Emailed this comment after he left meeting: Courses 4 and 5 still need some work to make them clear and relevant, especially the advanced topics class. Has a concern that the five courses seem to be designed as two sequential packages but that each package does not have sequencing (i.e. pre-reqs). Concerned that students will take 1 and 2 concurrently in the same semester and 3, 4 and 5 concurrently in the same semester without that being explicitly addressed in the course design and in the proposal. Moreover, if the idea is for students to take certificate 1 before certificate 2,

why are Aqua 1 and 2 not pre-reqs for Aqua 3, 4 and 5 which indicate there is no requirement?

- **Theresa Talley:** Did not attend but emailed the following feedback: In Aqua 5: Permitting and Logistics, it may be nice to give a nod to business and marketing (along with food production, handling, delivery). Business may be part of a tier 3 (i.e., beyond these certificates), but something that gives a brief peek into types of businesses they may encounter and what's needed to operate a facility (e.g., a mention of typical expenses and income, relationship of productivity and quality to income, the value of marketing and image). The goal would be to give the entry level staff a view into the bigger business picture (and how their actions/performance contribute to that) and maybe plant a seed for future goals. Bus 55, the elective for tier 1, doesn't seem to address anything this specific.

Again, that's a small thought and I think the overall curriculum plan- tier 1 and 2 and the contents of each- seem like a good idea and I agree with going forward with it.

Results of the vote to pass the updated courses and certificates as outlined:

- Diane Windham – NOAA - YES
- Luke Gardner – UCSD Scripps – Moss Landing - YES
- Janet Kubler – Cal State Northridge - YES
- Linda Chilton – USC Sea Grant - YES
- Marslaidh Ryan – Heal the Bay - YES
- Peter Struffenegger – Urchonomics - YES
- Michael Lee – Cal State East Bay – ABSTANE (left meeting early)