Charge Summary
Task Force on Class Sizes -
*What are the optimum class sizes at different levels and fields at UAF and how do we achieve those results while improving the student experience?*

*How do we achieve an average class size that is closer to our peers, possibly through larger GERs to account for smaller upper division and graduate classes?*

Introduction:
There are many considerations when determining optimum classes sizes at an institution as diverse as UAF. The diverse educational mission at UAF results from its broad geographical range, diverse student population, and degrees ranging from occupational endorsements to Ph.D.s. Different units may have different missions. For example, the College of Liberal Arts (CLA) has a relatively large teaching component (60-70%) on most of their workloads. The College of Fisheries and Ocean Sciences (CFOS) has a considerable expectation for research and obtaining significant external funding as part of their workloads, where on average, they have equal expectations in teaching, research and service. There is a wide range of faculty contributions based on their workloads and their contributions in teaching so it is a challenge to determine a baseline for teaching workloads at UAF.

For our charge, the Task Force concentrated on baccalaureate programs and reviewed data provided about class offerings, including their enrollment numbers, class sizes, maximum limits, number of GER sections offered, their modalities and times offered for face-to-face (F2F) sections. Additionally, we examined Teacher to Student ratios of our peers compared to UAF. In this document, we briefly describe our findings, recommendations, and considerations when determining optimal class sizes.
Findings:
The Student/Teacher average ratio for our Peers is approximately 17/1 and the UAF average is 11/1.

Class duplication - The Task Force reviewed the Spring 2019 semester General Education Requirements (GERs) course offerings to identify if there were duplicate courses being offered on the same days and times. The results showed that there were, in fact, some duplication of courses, but not at a substantial level. It appears that departments are working across the campus to ensure that there are a variety of time and day options for students and minimizing duplication. Where there is duplication, the data showed that the courses were either filled or close to filling, requiring the additional courses in most cases.

The Task Force also identified that enrollment caps for different sections of the same course were not always consistent and often depended on the campus and delivery method. For example, a WRTG 111 course offered in a lecture format may have more seats available for students than the same WRTG 111 course offered through eCampus.

Online courses and complete programs that are online are showing an increase in enrollment when compared to other modalities and offerings. UAF has an outstanding eCampus that supports this endeavor. Many of our GERs are online and most can be developed for online delivery.

A hypothetical starting point for determining optimum class size is a fiscal “break-even” calculation, which is the number of students enrolled in a course required to fully support the instructor’s salary for that course. On average, the fiscal “break-even” class size is 30-40 students for 100-200 level courses and 25-35 students for 300-400 level courses. The optimum fiscal “break-even” size is strongly dependent on college as salaries vary among them. This simplistic calculation takes into consideration teaching workload, 9-month base salary, and the number of credits taught averaged across all teaching faculty in the unit. We had complete data to perform this calculation on 4 (CEM, CFOS, CLA, CTC) of the 11 units for which workloads were provided. It is important to note that a fiscal break-even point is frequently not achievable due to multiple considerations that may limit section size such as accreditation requirements, safety considerations, space limitations and student experience. Another important concern is that total enrollment has been declining and establishing an optimum class is also dependent on enrollments.

We examined section enrollment numbers for GER courses taught at the Fairbanks campus (i.e., distance, CTC, and rural campuses were not included) and found that most sections have approximately 15 students (see histogram below). The distribution of section sizes results from very large 100-200 student courses (e.g. GEOS, ECON, PSY, PHYS) that may have several associated laboratory sections that are limited to 15 students for safety and/or lab capacity reasons. These courses are taught with one
large lecture by a single faculty and then split into many lab sections with different CRNs. Enrollments would likely be more accurately reflected when multiple lab sections are counted as one course. Additionally, honors sections are often listed as a different section even though those students are enrolled in the honors section of that class. In class schedule it is listed with a different CRN yet at the same time. These are examples of how UAF’s accounting of classes can be misleading.

Finally, with the change from the Perspectives of the Human Condition (PHC) Core Curriculum to General Education Requirements (as requested by the BoR so that UAF general education would align more closely with that of the other UA MAUs) there has been a proliferation of options in the GERs. These more numerous GER options, combined with a significant overall enrollment drop at UAF, have competed for fewer students with a resulting decline of classroom enrollment as compared to the historical core curriculum classes. We have no data on the student experience where smaller student class sections are compared to the larger class size.

**Recommendations:**

- Increase total enrollment (it is obvious yet it must be stated).
- Establish and promote dual enrollment across the GER offerings that will satisfy high school requirements as well.
- Align GER course scheduling between programs to reduce conflicts/redundancies and improve fiscal efficiency in course offerings.
- Review the class size capacities and increase the total number of “seats” per section when possible. This can reduce the number of sections offered.
- Strive for enrollments that ultimately lead to program sustainability. When determining program sustainability, several factors will need to be considered on a unit-basis. See the variables listed below.
- Gather more information about student experience by conducting surveys from the student body on this topic.
- Allow GER Social Sciences (S) and Humanities (H) courses to double-count towards a major. This should have the effect of increasing enrollment in these (S) & (H) classes.
- Where appropriate, develop complete degree programs for online delivery. This must be done soon. Emphasize quality programs and student success metrics as outcomes.
- Develop larger section classes in formats that lead to student engagement and success. There are innovative practices to consider in F2F, hybrid and online.
classes. Possibilities include flipped or otherwise non-traditional methods to teach these larger sections. In large classes (other than large science lectures), use TAs and/or trained student assistants to lead breakout sections similar to the science laboratory sections.

- Implement separate “L” (L = Laboratory or Lab) sections for all classes that have (relatively) large lecture sections and smaller breakout sections (labs, recitations, small group sections). Do not count the “L” sections towards class size data as these are smaller sections of a single class, rather than additional class sections as listed in the schedule. This is a double-count of students (once in lecture and once in a lab) thus skewing the average class size accounting.

Considerations

Variables when considering optimal class size
- Professional and accreditation requirements
- Specialized instruction needs (Safety/laboratory/studio concerns often limit class sizes)
- Availability of instructor (limited faculty with subject specialization, sabbatical absence)
- Approved meeting times (prime time for some classrooms, faculty preference, nights and weekends have more availability as these times may not be as desirable for faculty)
- Workloads - research/teaching considerations- (workload: course releases for sponsored research or tenure considerations)
- Program capacity and program demand
- Upper division and graduate course planning ideally should be planned for at least two years in advance to determine offerings that support degree requirements to facilitate timely graduation and student success.
- Student population- non-traditional, academic preparedness, married, rural, military, and foreign students may all impact student success.

Factors when considering the Student Experience
- Define aspects of the student academic experience within course delivery considerations:
  - Modality: Face-to-Face (F2F), Online Asynchronous, Hybrid Synchronous, Distance, audio/video. It is important to understand how each modality impacts the student experience.
- Student success measures: Degree completion time, retention data, recruitment, enrollment, quality instruction and outside classroom engagement.
- Appropriate offering of each program’s courses necessary for timely degree completion
- Accessibility- technology, and availability of offerings for resident, distance, and rural students.
- Does class size impact the student experience? Surveys are needed.
- Student population and needs consideration: diversity, non-traditional, academic preparedness, disabled, family and daycare

What things are we already doing?

- CLA Dean has requested departments to review offerings and, where appropriate, increase maximum capacity on GERs and other program classes and to cancel classes which may be redundant across programs.
- CLA has three programs that are offered completely online (Justice BA & MA, Psychology BA) and several programs that very near to offering their BA programs entirely online (History, Political Science, Communication (COJO)). All of these programs have their classes taught F2F as well. Two CLA programs are taught via distance (Social Work BA and Indigenous Studies MA) through a variety of modalities.
- School of Management (SOM) has been the most proactive and successful of the UAF units having their bachelors and masters programs completely online.
- CNSM Interim Dean implemented changes for Fall 2019 to count the labs separately from the lectures to include large lecture classes in the data. Previously, these sections were mis-attributed.
- Many units are developing a strong focus on online course delivery by collaborating with eCampus, utilizing their expertise to prepare courses and complete programs for online education.