**Charge 5:** Grading and academic integrity policies – should we continue with or change Spring 2020 approach?

Assessment and academic integrity issues were identified as key challenges in the earliest discussions of the transition to remote delivery in the spring. It is critical that this issue be addressed, for the benefit of both students and instructional staff. There exist three distinct questions that need to be addressed:
- Grading policy: Normal grading expectations, student option S/U, or all S/U are the key options
- Assessment modalities: Especially between (high-stakes) exams or other assessment tools
- Academic integrity: How to maintain academic integrity, and how to address infractions

**Grading policies:** The exigent circumstances in the spring prevented deliberate consideration of alternate assessment plans, and limited time to address equity issues with students around such elements as access to technology (internet speeds, printers) and learning environments. However, moving into the fall, the committee believes it is necessary to move toward a more conventional model for grading that recognizes changed instructional modalities without significant changes in the curriculum structure and quality.
- Grades are an essential tool for many critical functions, such as gating affiliation for programs (CS in particular) and graduate / professional school applications
- While alternate assessments could be used for some functions, such as competency exams for affiliation after return to residential operation, there are downsides including additional stress on students from these high-stakes exams.

**Recommendation 1:** The committee believes that any university-level decision on a grading policy should be definitive (to provide clarity to students and faculty) with any change only occurring under the most extreme of situations. The majority opinion is that grading policies should return to the conventional graded format with a suggestion that faculty consider the student option (letter or S/U) if appropriate. The majority does not believe either mandatory S/U or universal student option (student choice of S/U or graded in all courses) would be appropriate as we move forward.

However, it should be noted that there was a very strong minority opinion from student members of the committee that adopting a universal student grading option would help address the underlying inequities in learning during the pandemic including time zone issues, unequal home environments, and illness/bereavement, while allowing students to choose the grading option that works best for their needs and situation.

**Recommendation 2:** If the fall structure mandates a large fraction of students in remote (home) online learning situations, resources should be prioritized to ensure students are not disadvantaged by this model due to technological limitations or learning environments. Flexibility with respect to course requirements, timeframes, and metrics will likely be necessary to achieve this goal. Ensuring faculty understand the challenges will also be a necessary communication. The university must also provide sufficient financial resources towards securing technology solutions for these students.

**Assessment modalities:** Within the residential instruction model, in-person exams have evolved as an efficient assessment that in many cases are not necessarily the best assessment. The online environment provides the need, as well as an opportunity, to encourage faculty to consider alternate assessments that address and challenge more creative expressions from students.

**Recommendation 3:** CTI should identify and/or develop resources to help faculty to move away from exams to alternate assessments including projects, presentations, design efforts, etc. in courses where such assessments are appropriate. Wherever possible, these resources should include concrete exemplars from a range of disciplines alongside more general guidelines.

**Academic Integrity:** The town hall meeting with AIHB (academic integrity hearing board) chairs and interested faculty confirmed many of the challenges with academic integrity in the remote delivery modality. The general consensus was that violations increased by at least a factor of two and in some cases may completely overwhelm the adjudication procedures in the Academic Integrity Policy. Online sites such as Chegg, Course Hero, and Varsity Tutors provide increased opportunity for infractions with limited potential for discovery (with CS as a notable exception given technical tools to monitor for code commonality).

There are multiple approaches to addressing AI issues, but most center around either a "top-down" effort to ensure exam integrity (e.g. proctoring, lockdown browsers) or around redesign of assessments (e.g. heavier reliance on essays, homemade question banks etc.). While the latter is clearly preferable, it requires considerable effort to design fair and meaningful problems and are often time-consuming to grade as well. However, shifting the emphasis of assessments from conventional high-stakes exams will be a necessary part of the online assessment strategy.

Addressing this issue will require substantial focus, diligence and potentially resources. There does not seem to be *appetite* for extensive and invasive online proctoring of high-stake exams, but this needs to be included within a menu of options where other solutions are not viable. There is unlikely to be any technical solution that can broadly address this issue, but there are several that can help to mitigate the potential and reduce the impact.

Some level of central coordination, especially around the internet-based sites, will be critical. Distributed effort among the various colleges leads both to unnecessary duplication of effort, but also reduced efficacy due to limited knowledge.

**Recommendation 4:** In discussions of the fall academic calendar options, the impact of schedules on academic integrity should be carefully weighed. The committee strongly believes that calendar options that include in-person exam periods (either at the end of the semester or after a significant portion of the semester) would be the most effective means to minimize academic integrity issues around exam-type assessments. Addressing academic integrity must, however, be balanced against other challenges raised by in-person exams including TA and student safety, psychological stress of high stakes assessments, and logistical challenges of administering both in-person and remote exams for a single course.

**Recommendations 5:** The committee recommends a three-pronged effort to manage academic integrity in an online environment: (i) education and discussion, (ii) reduction of motivation and opportunity, and (iii) coordinate efforts to address infractions at the university level. Details of these recommendations are more fully enumerated in the full report. Key elements include:

Education and discussion: Academic integrity be intentionally discussed during the early weeks of an online semester and expectations clearly defined for students and faculty in course syllabi.
Assist efforts to address infractions at the university level: The committee recommends the creation of a central office (likely under the Dean of the Faculty's office) that would be able to assist unit

AIHBs in addressing time-intensive investigations and large scale violations of Academic Integrity, including coordinating discussions with online sites such as CourseHero and Chegg.

Reduction of motivation and opportunity: Reduced reliance on high-stakes exams and structuring of assessments can significantly decrease potential for AI violations. However, the committee is keenly aware that many options are applicable to only a subset of courses and that many options entail significant faculty/staff effort. Despite the challenges to maintaining academic integrity in online exam formats, we do not believe that online proctoring is a viable solution.

**More Extensive discussion of these recommendations:**

Education and discussion: Academic integrity be intentionally discussed during the early weeks of an online semester and expectations clearly defined for students and faculty. Key elements:

- Required **Course Academic Integrity Policy** section in all syllabi with explicit statements about what is and is not permitted. This should be particularly detailed with regard to exams, use of online resources in homework and exams, and collaborations.
- Disseminate recommendations for faculty (through the Dean of the Faculty office) to develop and reinforce a sense of "community at a distance" to discourage AI violations (perhaps useful but probably of limited direct impact).

Coordinate efforts to address infractions at the university level: The committee recommends the creation of a central office (likely under the Dean of the Faculty's office) that would be charged with coordinating Academic Integrity investigations and resolutions across the campus. This office would, for example,

- Coordinate centrally orders for removal of copyright materials from sites such as Course Hero and Chegg
- Negotiate with sites to obtain identifying information on violators (IP addresses, accounts) that could be used to support investigations within colleges
- Proactively monitor sites for activity in coordinate, especially, with early gateway courses where violations are most prevalent
- In the event of large-scale violations in a course, empower this entity to facilitate and manage primary hearings to reduce impact on teaching staff.

Reduction of motivation and opportunity: Reduced reliance on high-stakes exams and structuring of assessments can significantly impact potential for AI violations. However, the committee is keenly aware that many options are applicable to only a subset of courses and that many options entail significant faculty/staff effort. In parallel, there are relatively low-cost solutions that will help the university address and manage some of the online sites. This is a menu of options that will only be appropriate for a subset of courses.

Managing online sites and tracking students that contribute materials to these sites:

- Encourage inclusion of copyright notices on all materials downloaded to students; the existence of the copyright will facilitate demands for offending material to be removed from online sites
- CTI and CIT explore and/or develop the ability to watermark PDFs that are downloaded by students from Canvas (much like research articles). While this can be circumvented by students, it increases the effort and makes distribution to offending sites an intentional decision

Proctoring options:
- We do not believe that online proctoring is a viable solution to the academic integrity issues

Exam modifications:
- Shift exams from short / specific answer to open-ended and complex questions
  - Difficult to implement and grade in large courses
- Oral exams (in-person or recorded with random check)
- Use of one-way (non-return) questions in exams through Canvas; for maximum security choose options to display just one problem at a time and disallow backtracking
  - numerous issues including additional stress to students
  - pedagogically undesirable but may be a necessary option in some circumstances
- Question banks for multiple choice … effectively different version for different students
  - Training from CTI for Canvas tools to randomize values / randomize physical situation
  - Alternative would be N exams for a given course, randomly assigned
- Random or selected in-person "recheck" via oral exams / discussion
  - How to address bias in the recheck? This was a significant concern in the committee.

Exam scheduling:
- University scheduling of exams to minimize overlap for students, and pressure of multiple assessments
- Reconsider recommendation of more numerous, but lower weight, assessments in the online environment; students indicated increased stress / work from this increase
- Provide alternative options to the Spring 2020 requirement of a mandatory 24-hr window for exams
  - Enable faculty to provide two options for timed exams 12 hours apart to address time-zone challenges
  - Provide faculty with guidance on advantages and challenges of 24-hour (or longer) untimed exams