Some Suggestions on Maintaining Academic Integrity while Administering Exams without Proctoring
Report of the Provost's Ad Hoc Committee, October 2020

Although trusting our students, especially during unprecedentedly difficult times, is basic to an effective teaching and learning relationship, blind trust serves no one: ignoring academic dishonesty undermines the learning process and is unfair to students who practice academic honesty. In the long run, turning a blind eye to dishonesty subverts learning and harms our students by lessening the value of a Baruch degree.

Some students find that proctoring—even in face-to-face semesters—suggests a lack of trust on the part of faculty. Others have made clear that an absence of careful proctoring signals to them that faculty members don't care if their students cheat; and many students point out that this leads to an uneven "playing field" in which those who do not cheat are at distinct disadvantage.

Clear communication about why we care about these issues seems key. Our goals are to minimize academic dishonesty and maximize the integrity of the learning process. We care about academic integrity for many reasons, including the degree to which dishonesty subverts the learning process.

The ideas and language that follow come from suggestions by faculty and staff colleagues as well as from Baruch's Task Force for the Future and other campus sources, including *Balancing Academic Integrity during Final Exams with Student Privacy, Access and Equity in Spring 2020,* the report compiled last April by members of our Center for Teaching and Learning (CTL), linked at the end, along with a recent article from the NYT. Please recognize that the suggestions below will not work for every course and every instructor. In some cases, they may work well and in others not at all.

1. Suggestions for before the exam

Why do students cheat? Our students suggest that the most important reasons include anxiety about the difficulty of exams, the need to maintain grades to enter competitive majors, and the knowledge or perception that "other students cheat"—in short, that they need to cheat to remain academically competitive.

How can we address these motivating factors? Here are some suggestions, mostly quotes from Baruch colleagues:

   a. Provide easy access to previous and/or practice exams. These help convey clearly the expectations of the instructor.
   b. Create several lower-stakes assignments or quizzes that contribute to the final grade instead of relying exclusively on a high-stakes midterm and final.
   c. Open-book tests also help allay anxiety: create tests that emphasize previous assignments or class discussions and don't lend themselves well to Googling. The time period for the exam should be short enough that, if the student hadn't done extensive preparation for the test, it would be impossible to do well—but long enough that knowing where to go for references is possible, if needed.
   d. Administer weekly pre-quizzes (assigned at the end of the previous week and due on the day of the first lecture of the week) to measure student engagement with the class material (if not necessarily their synchronous wakefulness). They are low stakes but substantive multiple-choice reading comprehension quizzes administered on Blackboard. At say, 1.5% of the overall grade each, that can add up to 15% or even 19.5% for the semester. (They might comprise 10 questions randomly generated from a pool of more than 20; the appropriate BB settings make them excessively time-costly, if not impossible, to cheat on). Autonomous before-class engagement with the material can greatly enhance in-class dynamics (and, so, presumably zoom wakefulness).
   e. Ask students to write (type) and "sign" pledges attesting to their adherence to the precepts of academic integrity <u>before taking each exam</u>. Example "I hereby pledge to take this exam without giving or

receiving unauthorized assistance or by consulting sources that are not allowed during an exam." This can appear before the exam or as its first "question."

- Research supports the effectiveness of this approach, see Dan Ariely, *The (Honest) Truth About Dishonesty* (HarperCollins 2012).
- But please note that Ariely affirms that the student must actually produce the pledge (in f2f circumstances this would mean writing it out by hand) as opposed to merely signing or checking off a box next to a pre-printed pledge.

f. Create exams that students perceive to be fair (even if difficult), grade them fairly, and return them within a reasonable period.

g. Remind students of the potential penalties for academic dishonesty (which should appear on your syllabus). These could include academic sanctions up through an F for the course and administrative sanctions including suspension.

h. Assign group work—encourage collaboration instead of disallowing it.

i. Finally—this could easily come chronologically first—explain to students why academic honesty is important to you. One reason widely shared by many who teach is that academic dishonesty subverts learning: students cheat <u>instead</u> of learning.

2. Suggestions regarding the exam itself (mostly quotes from Baruch colleagues)

a. Include a clear ethics agreement/pledge and don't allow students to take exam unless they explicitly agree to it via the first exam question. (See e., above.)

b. Use non-multiple choice, open-ended, analysis-based questions (They require more time to grade but do not have answers easily available.)

c. Ask only open-ended questions and allow students to use their notes, the course's web site with notes, and their textbook. Sometimes multiple answers are acceptable; ask the students to justify their answer.

d. During the exam (which might be on Blackboard) maintain a Zoom session and/or phone number so students can ask the professor questions or let professor know of technical issues (which might lead to their being allowed to retake exam).

e. Use Blackboard to administer the tests with the following:
- Each question appears separately; students cannot go back to change an answer to a question. (There are, of course, conflicting opinions about not letting students return to previous questions.)
- Randomize order of questions (the question is #3 for one student and #17 for the next) *and* answers (one student's multiple-choice A is another's C).
- Use specific time for test and auto-submit of exam after time is done. That way students can't take longer to find answers elsewhere

f. Consult regarding Blackboard exams with BCTC staff.

g. Use multiple versions of test so that not all students take the same test.

h. Do not re-use an exam except as a practice exam.

i. Some international students have difficulty solving a lot of questions simply because it takes more times for them to read and understand the questions. Best to make the questions as short as possible.

j. Increase the number of questions so that students do not have time to search for answers:
- You can make the maximum possible score in test lower than the total number of test questions they have to answer. For example, a test can have 110 questions, but the maximum grade could be 100/100. This can ease the advantage that students who can read faster might have.

k. If student has to retake/restart test (because of technical problems), give them a different version.

l. Make the tests difficult (but not excessively so) and be willing to curve the final grades up (avoid curving individual exam grades). If the test is easy and there's cheating, you could end up with too many high grades and won't be able to curve down if you don't know who cheated.

m. Warn students from beginning of the semester that they will be tested on content only available during the lectures. During lectures, teach things that are unique to your lecture and test them on those, lessening the possibility of finding answers in textbooks, Google, or third-party sites.

n. If possible, create questions whose answers are unique to each student: e.g., what is your IP address and how did you get it?, or "design an algorithm that uses the first letters of your first and last name," or "write something related to your background," etc.

o. Create questions in which you don't ask students directly about what you taught but about how they can use what you taught to understand other information. For example, if you taught about the HTTP and HTTPS protocols, you could ask "what is the port number of the protocol used for using your web browser to view websites" (here they will have to know it is HTTP or HTTPS that you are referring to and they will have to know how to look up a port number).

p. I organized tests into three sections with questions from different parts of the class covered in all sections (i.e., not all Chapter 1 and/or the first two lectures in section 1; instead, chapters and lectures 1-7 in each section so that students couldn't easily look up the answers because there was just too much material.) Then, I put a timer on it. I figured out how long it should take to complete the section and put an auto-submit timer on it. So, students can't try to keep working once time is up because the exam auto-submits. It seems mean but if students know the info, then they should have been able to do the test. Also, by doing it in sections, if there were to be a problem with an internet connection, they wouldn't have to re-do the whole test. I don't want students copying questions, saying that at the end they timed out and then ask for a reset to retake the whole thing. It would be suspicious for students to time out on each section on a test in four sections.

q. I partitioned my exams into multiple parts and used strict time constraints for each part so students would have limited time to communicate with other students and also would have to be in the same exam part to do so. In my post-semester feedback, students told me that they found these to be effective deterrents to cheating in my class.

r. The exams that I give are long, with a lot of short answers, which may minimize the amount of time students have to use other sources to look up answers. I administered the exam using Blackboard's testing facility. At the same time I ran a parallel Zoom session. The students' mics were muted, and I told them that if they had a question, they could submit it to me using Zoom chat. I had set chat up so they could chat only with me, not each other. I would respond to them using chat, or if there was something that was pertinent to the class, I could use my mic to make an announcement.

s. Some platforms (e.g., McGraw-Hill's *Connect*) allow us to create unique exams for each student. For short-answer questions, we created "algorithmic questions," where the random numbers used in the questions are auto-generated by *Connect* within the range we set. For multiple-choice questions, we randomized the order in which the choices appear. We had 5 choices, so the number of possible combinations were many, combined with the variations in multiple versions of test. These unique questions can be used to track students who share the questions on websites such as Chegg.com, which is mentioned below.

3. After the exam
We usually deal with suspicions of academic dishonesty after an exam. Please keep in mind that students are entitled to due process, which includes reporting the issue to the Office of the Dean of Students: https://www.pavesuite.com/Baruch/PublicPortal/CustomIncidentReport?code=AI. Whether you report the student first, or speak with the student first and *then* report is up to you, but please *do report*, even if you have only suspicions without "proof." (Perhaps what you are concerned about has been reported before for that student.)

Due process means, in part, that you may not level an academic sanction if the student has not admitted to the violation of academic integrity or has been judged "responsible" by our Academic Integrity Officer, Associate Dean of Students Annie Virkus-Estrada, or by a faculty/student committee empaneled to do so. (Note: an academic sanction is up to the individual faculty member, provided that the range of possible sanctions is communicated on the syllabus. Such sanctions usually mean a lowered grade, including an F for the exam or assignment or an F for the course.)

Following up with a student by Zoom or phone can help if you suspect that academic dishonesty has occurred. You can ask students how they arrived at the answers they submitted and gently explore their understandings of the issues posed in the exam. (One can do similarly if the issue is possible plagiarism.) If you conclude that it is unlikely that they could have reached the answers on the exam independently and without using sources that had been disallowed (e.g., textbooks, notes, etc.) then be sure to make that part of the report of the incident—or submit as a follow-up to the report.

Many students use Chegg.com to ask for help during exams. Here is an example: https://www.chegg.com/homework-help/questions-and-answers/yolpa-company-components-division-produces-parts-product-divisions-within-company-well-out-q50954007?trackid=dcee1227cace&strackid=141afeb303f2. Membership, which costs $14.95/month, allows students to ask an unlimited number of questions and have access to homework solutions from textbooks. They can get their answers almost in real time.

From our Academic Integrity Officer, Associate Dean Annie Virkus-Estrada:

> I've found Chegg to be very cooperative, though after the fact. Instructors can reach out to Chegg and provide specific URLs that have their course/test material and Chegg will remove that material. They will not take down anything that can be found in a textbook, unless the professor wrote the textbook. Chegg will provide me (they will provide only the Dean of Students or Academic Integrity Officer) with the names of anyone who posts or accesses specific URLs given a period of time, like an exam.

You can identify the students who are involved in cheating and use the questions or photos they uploaded as evidence if you customize the questions for each individual. (It's best not to mention how you identified the cheating.)

Balancing Academic Integrity during Final Exams with Student Privacy, Access and Equity in Spring 2020
https://blogs.baruch.cuny.edu/ctl/balancing-academic-integrity-during-final-exams-with-student-privacy-access-and-equity-in-spring-2020/

The CTL's *Quizzes, Test, and Alternative Forms of Assessment* includes links to specific Blackboard tutorials relevant to many of the suggestions mentioned above.

October 2, 2020 article in the New York Times regarding issues with online proctoring:
There's little new in this article—the CTL wrote about these issues last spring—but it's a significant reminder about how technically precarious these systems are, and how in a college with a very diverse population we risk disastrous incidents. https://www.nytimes.com/2020/09/29/style/testing-schools-proctorio.html?action=click&module=News&pgtype=Homepage