Exam Integrity Matrix

Upholding academic integrity in your course is a two-fold endeavor involving both education and prevention. The matrix below contains measures you can take to maintain exam integrity in digital learning environments. Please review the second page of this document for more details about each measure and links to additional information.

WILLIAM & MARY

CHARTERED 1693

Preventative Measure	Prevents Against	How Effective?	Student Inconvenience	Faculty Effort	Technology	Cost
1. **Create a culture of integrity**	All violations	Very	Low	High *requires consistent & long-term effort*	N/A	N/A
2. **Ask students to reaffirm the honor code before an exam**	All violations	Very	Low	Low	Blackboard	N/A
3. **Delay making grades and feedback visible to students until all exams are submitted**	These measures make it more difficult for students to give and receive unauthorized aid, and to use unauthorized materials, such as past exams.	Moderately	Low	Low	Blackboard	N/A
4. **Randomize exam questions and/or answers**		Moderately	Low	Low	Blackboard	N/A
5. **Use question banks; add and remove questions regularly**		Moderately	Low	Moderate-High *requires set-up & writing additional questions*	Blackboard	N/A
6. **Incorporate open-ended exam questions**		Moderately	Low	Moderate-High *requires time to design & grade*	Blackboard	N/A
7. **Add a timer and other restrictions**	Increases effectiveness of other measures.	Very	Moderate *may cause anxiety/stress*	Moderate *requires set-up*	Blackboard	N/A
8. **Use a remote proctoring service**	All violations	Extremely	Moderate-High *may cause anxiety/stress; requires plugin and set-up*	Moderate-High *requires plugin and set-up*	Blackboard & Honorlock	$
9. **Use a plagiarism checker for written exams**	Plagiarism	Moderately	Low	Moderate *requires set-up*	Blackboard & SafeAssign	N/A

Overview

William & Mary's Honor Code is based on the premise that honor is a person's most cherished attribute. Faculty can engage with the Honor Code by creating a climate of honor and educating students about academic integrity. Additionally, faculty may implement reasonable preventative measures to deter cheating provided they protect students' privacy and are non-discriminatory. Designing assessments that make cheating more difficult, such as projects or written assignments, is one of the most basic ways to prevent academic dishonesty. There are also a variety of exam settings in Backboard that inhibit cheating, which are more effective when used in combination with one another. Contact the Studio for Teaching & Learning Innovation (STLI) for more information about assessment design.

Violations

Potential Honor Code violations include, but are not limited to:

- Giving or receiving unauthorized aid
- Using unauthorized materials
- Hiring someone else to take an exam
- Plagiarism

Visit Section VI: Honor Code Violations for more information.

Preventative Measures

1. Create a culture of integrity. One of the most effective ways you can prevent academic dishonesty and other unethical behaviors is by creating a culture of integrity with your students. Include a statement in your syllabus referencing the Honor Code and your expectations surrounding academic integrity. Provide clear guidelines for how the Honor Code applies to activities, assignments, and assessments in your course and refer to these guidelines regularly when communicating with your students. Visit the Dean of Students Office - Faculty Resources for model syllabus language and tips for discussing honor with students.

2. Ask students to reaffirm the honor code before an exam. Behavioral research indicates that when students are reminded of moral expectations before an exam, such as writing or signing an honor code, they are less likely to violate those expectations during the exam. Include the Honor Code pledge at the beginning of an exam and ask students to acknowledge it in some way.

3. Delay making grades and feedback visible to students until all exams are submitted. Waiting to make exam results and feedback visible until after all exams are turned in lessens the chance that students who have not yet taken the exam will receive information from their classmates and thereby have an unfair advantage.

4. Randomize exam questions and/or answer choices. Randomizing exam questions and/or answer choices ensures that each student receives a different version of the exam. You can randomize exam questions in Blackboard through the exam presentation options, or by using question sets. Question sets are groups of questions that can be randomly presented. You can also randomize answer choices for certain question types, further differentiating each version of the exam.

5. Use question banks; add and remove questions regularly. You can create a question bank using the question pools feature in Blackboard. Question pools should contain at least twice the number of questions needed for the exam. Questions in question pools are deployed in random blocks, creating a unique exam for each student. You can prevent future students from using past exams by updating your question pool regularly.

6. Incorporate open-ended exam questions. There are a variety of exam question types in Blackboard that require a written or calculated response. You can ask students to respond to a short answer or essay question in which they demonstrate their knowledge through writing. These types of questions take longer to design and grade, but may help you better determine how well students understand the subject matter.

7. Add a timer and other restrictions. Setting exam availability dates, setting a due date, and using the timer feature in Blackboard limit students' exam completion time. You can also restrict the number of attempts allowed. You also have the ability to extend exam times and make other availability exceptions for one or more students as needed. *Please Note: the force completion option is not recommended for asynchronous exams taken off-campus due to potential technical difficulties.*

8. Use a remote proctoring service. Honorlock is a browser-based remote proctoring service that uses artificial intelligence to monitor students taking an exam through Blackboard. The platform is compatible with any computer provided the user installs a Google Chrome plugin and uses Google Chrome. Honorlock can verify a student's identity, restrict internet navigation and other applications, record a student's test-taking environment, and more. You can customize proctoring parameters for each exam. An integrity report is produced after each exam, flagging suspicious activity for review. All data is encrypted, protecting student privacy. Honorlock is a licensed service paid for by the university and is recommended for high-stakes exams only when necessary. Contact STLI for more information. Contact Student Accessibility Services for guidance regarding proctoring options for students with testing accommodations.

9. Use a plagiarism checker for written exams. You can check written exams for plagiarism using SafeAssign and the assignment feature in Blackboard. SafeAssign produces an originality report for instructor review. You can also allow students to review their originality report before they submit an assignment, helping them identify areas where they need to cite sources.

Contact Student Accessibility Services for questions about how to make testing accommodations in digital learning environments.

These preventative measures align with recommendations made by the Dean of Students Office.