Ensuring Test Integrity and Security

The following important considerations for testing at Florida State University should be reviewed by all teaching faculty and other instructors.

Test Development
Ensure that your test measures the course objectives and content consistently over time and across students, and determine the level of test security based on the test’s impact on the student’s overall grade.

- **Validity.** Expert review to ensure test questions are aligned with course objectives and content.
- **Reliability.** Conduct item analysis and analyze reliability coefficients.

Purpose of the Test
The level of security required during test administration depends on the purpose of the test.

- **Low-stakes tests.** Generally, low-stakes tests count 20% or less of the final grade and are used to take attendance, encourage continuous studying, check progress, and flag for possible problems. They require less security.
- **High-stakes tests.** Generally, high-stakes tests count more than 20% of the final grade and are administered at the end of units, mid-term, or as final exams. They require more security.

Use of Resources
Decide whether students should have access to resources based on the purpose of the assessment and the type and amount of information tested.

- **Recall of information:** Examinees typically do not have access to any resources. Appropriate security measures should ensure that unauthorized resources are not used.
- **Application of concepts:** Examinees typically have access to limited resources. Appropriate security measures should ensure that unauthorized resources are not used.
- **Analysis and discussion:** Examinees typically have access to any number of resources. No security measures are necessary to control access to resources.

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**Time Limits**
Set appropriate time limits with the following considerations:

- Average time required to answer questions.
- Reduced time discourages excessive use of materials in non-proctored test administrations. (e.g. low-stakes online quiz)
- Test center opening hours will determine last check-in depending on test duration. (e.g. check-in ends at 3 PM on Fridays for a 2-hour test.)

**Test Availability and Locations**
Consider when and where students should be tested.

- **Synchronous testing.** All students are tested at the same time, which minimizes the possibility of sharing information about the test.
- **Asynchronous testing.** Students test at different times (e.g. when using a testing center), which is more convenient for the student but requires additional measures such as item pools to keep peers from sharing information about the test.
- **Seating.** Consider using different versions of a test especially if students will be sitting close together.
- **Proctoring.** Ensure that students’ identities are verified and that they are adequately supervised during the test.
- **Test center.** If you teach large class sections or hybrid courses, and also face difficult testing venues, you should contact **Assessment and Testing** for assistance. (644-3017)

**Use of Blackboard for Testing**
There are many advantages to administering your tests through Blackboard.

- **Randomization.** Enhance test security with randomized test versions drawing from test item pools.
- **Instant grading.** Multiple-choice exams are graded instantly and students can receive feedback about their performance on the test.
- **Automatic feedback.** Specific feedback can be associated with items and options to help increase learning through quizzes and self-assessments.
- **Item pools.** When testing asynchronously you can create individualized test versions by pulling items from a question pool.
- **Save paper.** Online tests require no paper copies.

**Online Testing Issues**
There are a number of security issues to consider when administering tests online to students in different locations.

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False identity. How can you ascertain the test-taker’s identity?

Unauthorized collaboration. How can you prevent unauthorized collaboration among online students during testing?

Using materials. How can you ensure that the students are not referring to materials or resources that are not authorized?

Copying items. How can you prevent students from copying test items and distributing them to peers?

One solution is to use proctored testing for high-stakes tests.

Please refer to our website for more information on proctored testing.

FSU Test Center. The test center uses a combination of human proctoring and technology measures to ascertain examinees’ identities and prevent them from accessing unauthorized materials or copying test questions.

Levels of Security

The table below distinguishes different levels of test security based on the amount of technology and human measures taken to increase security. For high-stakes tests, levels 2 or 3 are recommended, depending on whether students will be tested on site or off site.

<table>
<thead>
<tr>
<th>Security Measures</th>
<th>Level 0 Un-supervised</th>
<th>Level 1 Un-supervised</th>
<th>Level 2 Proctored Off Site</th>
<th>Level 3 Proctored On Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackboard Testing Features</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>time limit</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>multiple attempts not allowed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>feedback not provided</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>questions presented one at time</td>
<td>✓</td>
<td>optional</td>
<td>optional</td>
<td></td>
</tr>
<tr>
<td>randomized questions from sufficiently large pool of questions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>Additional Technologies</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>use of secure browser to prevent printing, copying to clipboard, etc.</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>use computer profile and firewall rules to prevent printing, copying, etc.</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Requiring Personnel</td>
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<td></td>
</tr>
<tr>
<td>identity verified</td>
<td></td>
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<td>✓</td>
<td></td>
</tr>
<tr>
<td>student supervision to minimize risk of acquiring image of test screen</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

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