



Using Proctortrack in Moodle

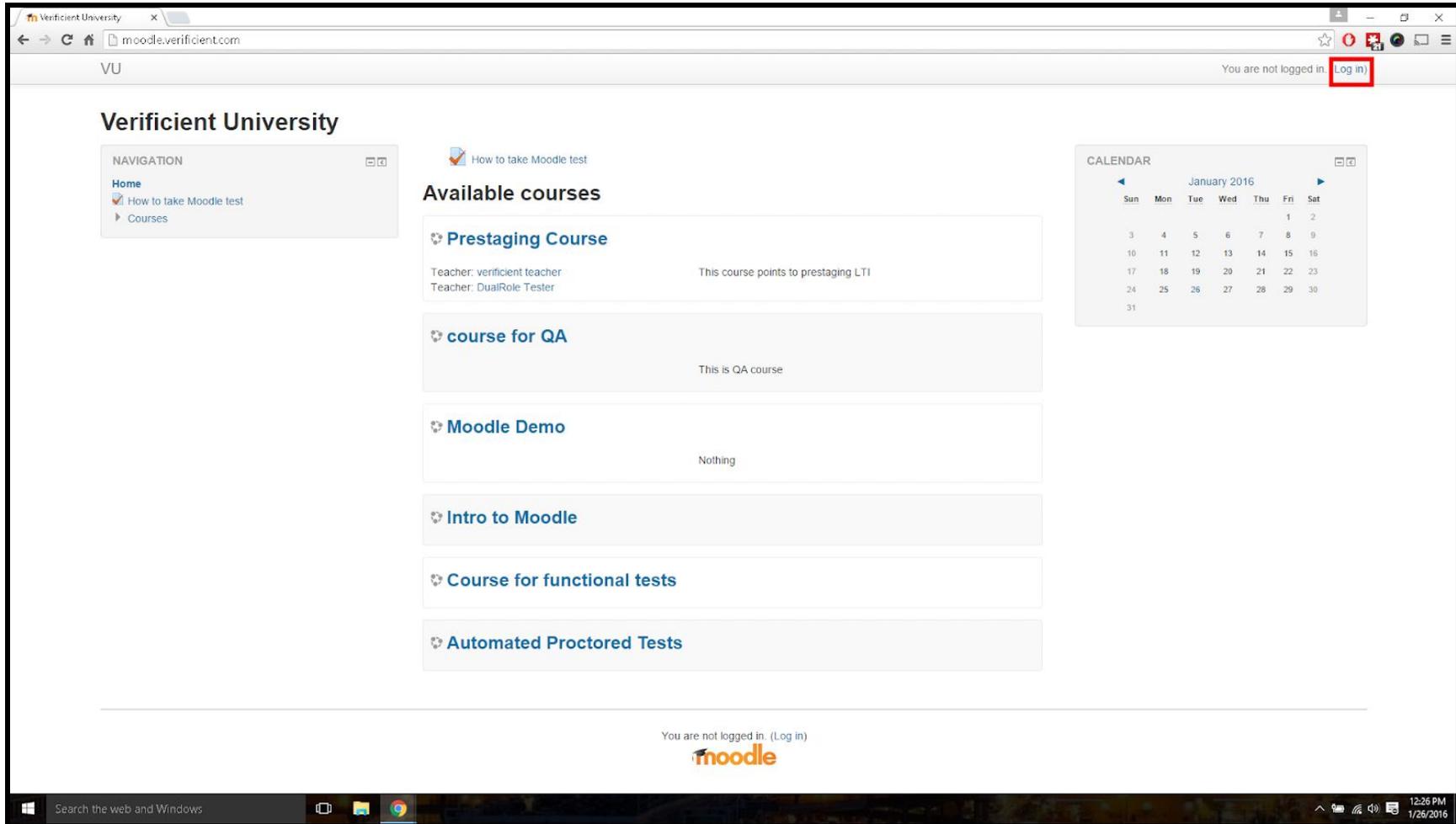
For instructor use only.

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Creating a Quiz

1.a. Click “Log in” to get to the login screen.

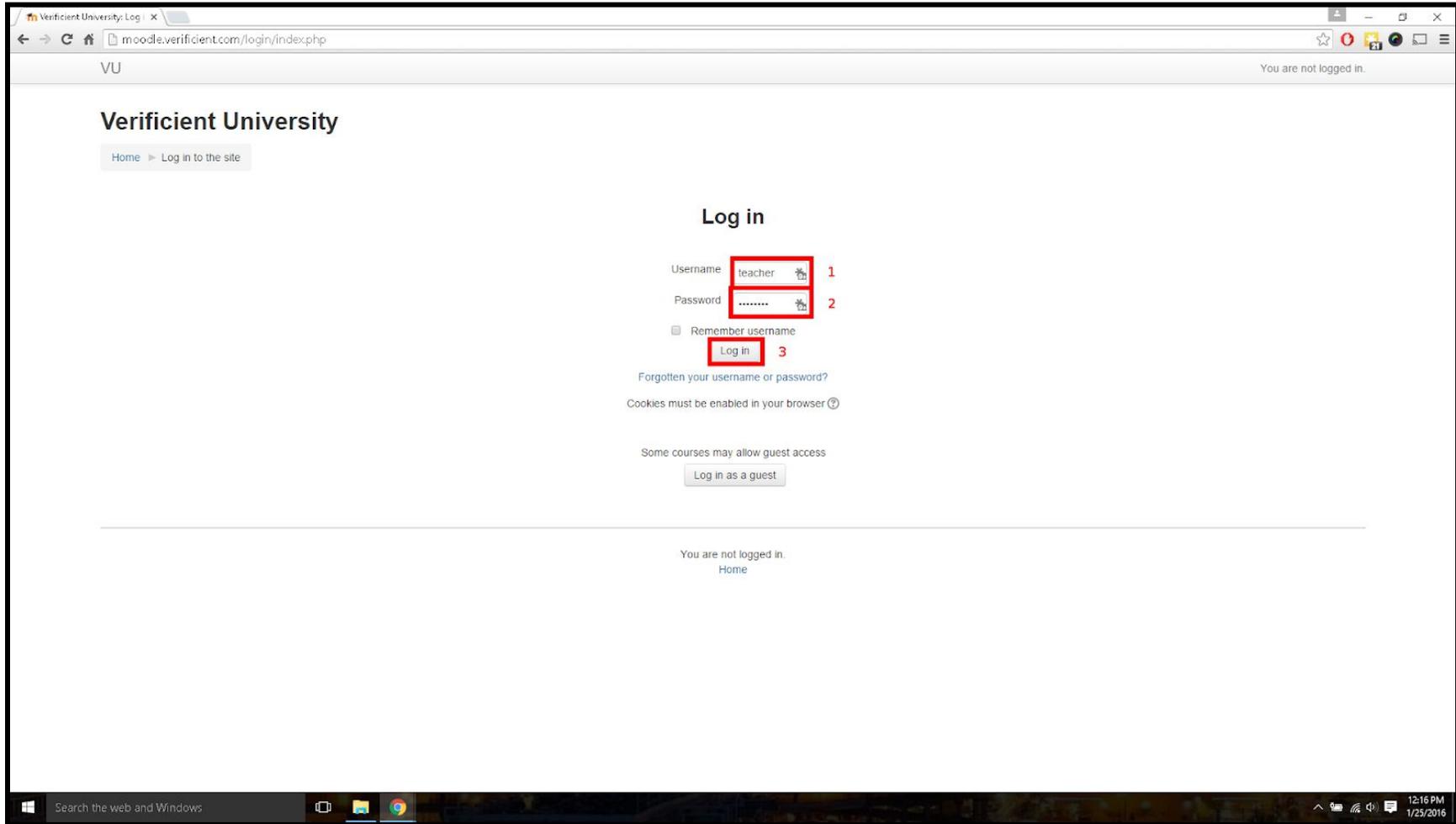


The screenshot displays the Moodle LMS interface for Verificient University. The browser address bar shows the URL `moodle.verificient.com`. The page header includes the text "VU" and "You are not logged in. [Log in](#)", with the "Log in" link highlighted by a red box. The main content area is titled "Verificient University" and features a "NAVIGATION" menu with links for "Home", "How to take Moodle test", and "Courses". A "CALENDAR" widget shows the month of January 2016. The "Available courses" section lists several courses:

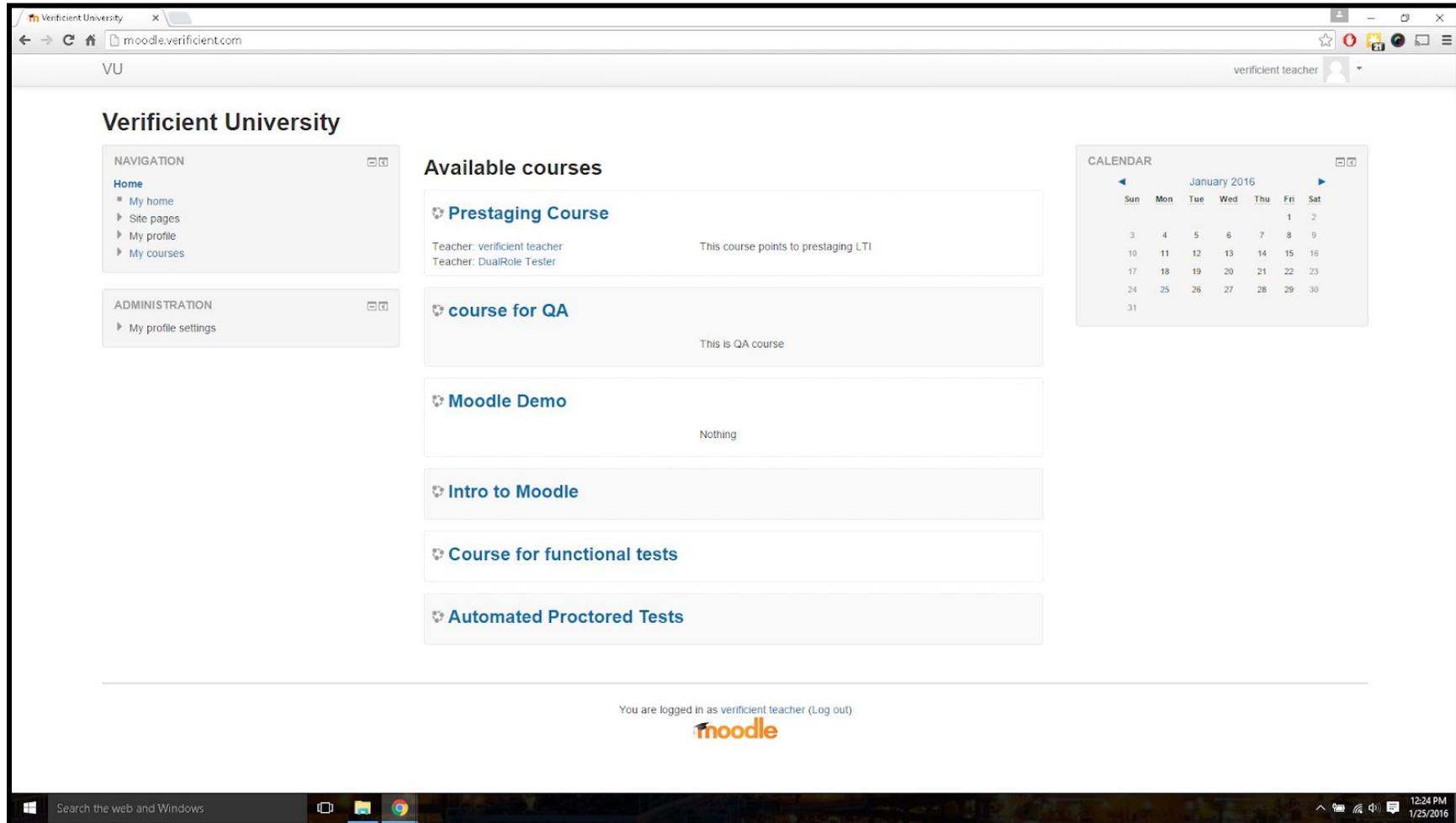
- Prestaging Course**: Teacher: verificient teacher, DualRole Tester. Description: This course points to prestaging LTI.
- course for QA**: Description: This is QA course.
- Moodle Demo**: Description: Nothing.
- Intro to Moodle**
- Course for functional tests**
- Automated Proctored Tests**

The footer of the page includes the Moodle logo and the text "You are not logged in. (Log in)". The Windows taskbar at the bottom shows the search bar and system tray with the date and time: 12:26 PM, 1/26/2016.

1.b. Enter “Username” (1) and corresponding “Password” (2) and click “Log in” (3).



2. Navigate to the desired course by clicking on it in the list of available courses.



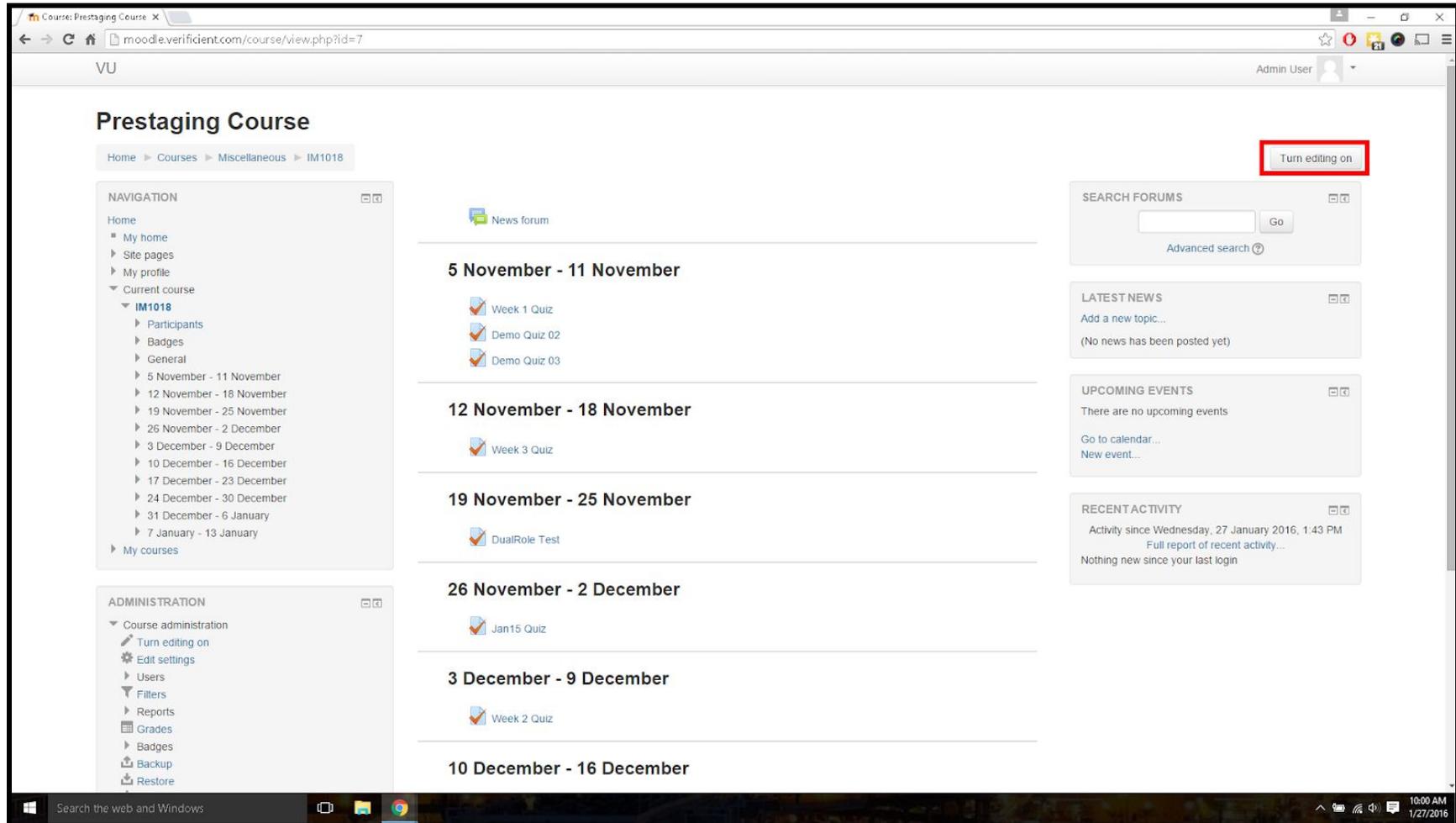
The screenshot displays the Moodle LMS interface for Verificent University. The page is titled "Verificent University" and shows the user is logged in as "verificent teacher". The main content area is titled "Available courses" and lists several courses:

- Prestaging Course**: Teacher: verificent teacher, Teacher: DualRole Tester. Description: This course points to prestaging LTI.
- course for QA**: Description: This is QA course.
- Moodle Demo**: Description: Nothing.
- Intro to Moodle**
- Course for functional tests**
- Automated Proctored Tests**

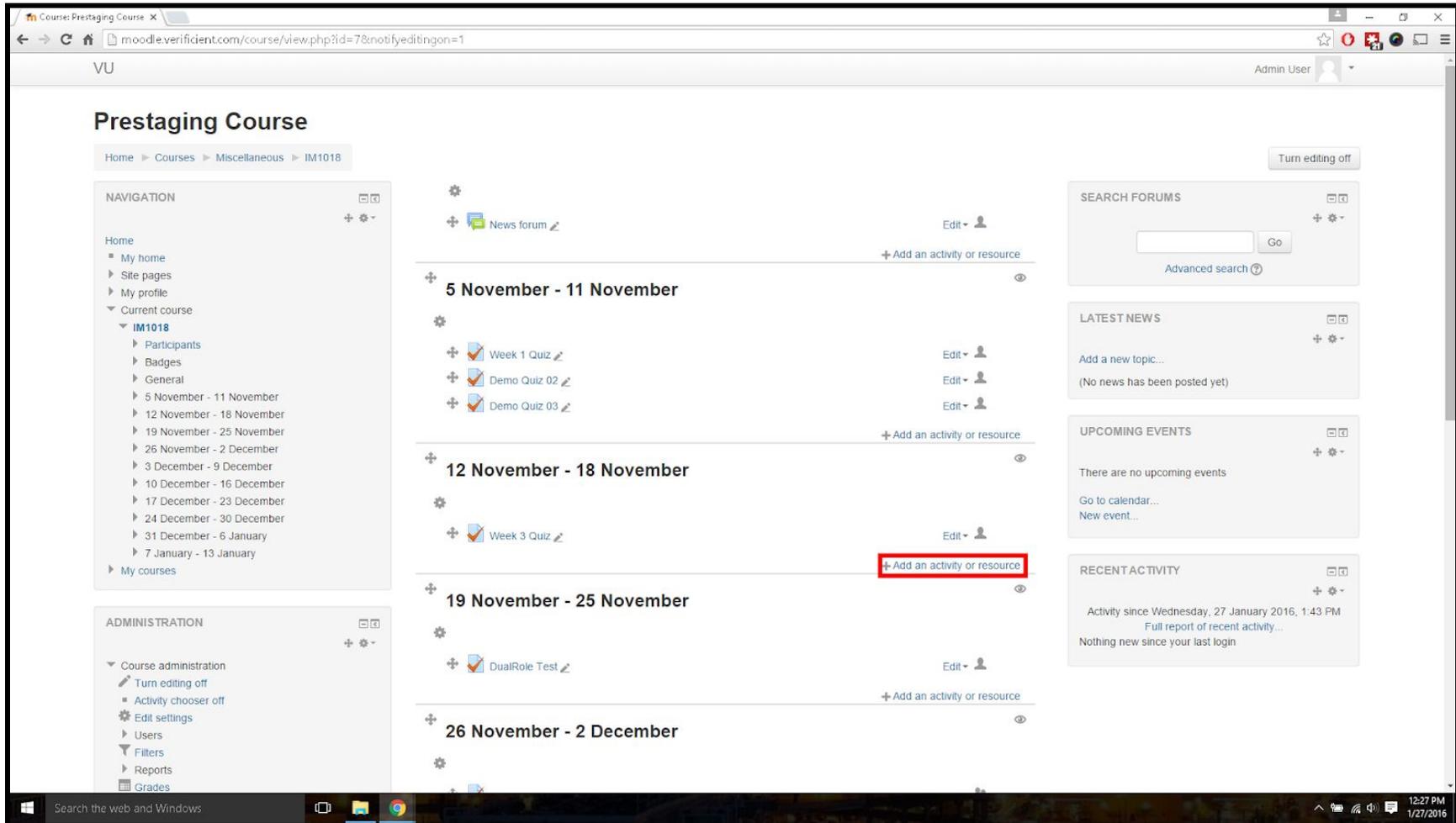
On the left, there is a "NAVIGATION" menu with links to Home, My home, Site pages, My profile, and My courses. Below it is an "ADMINISTRATION" menu with a link to My profile settings. On the right, there is a "CALENDAR" widget showing the month of January 2016.

At the bottom of the page, it says "You are logged in as verificent teacher (Log out)" and features the Moodle logo.

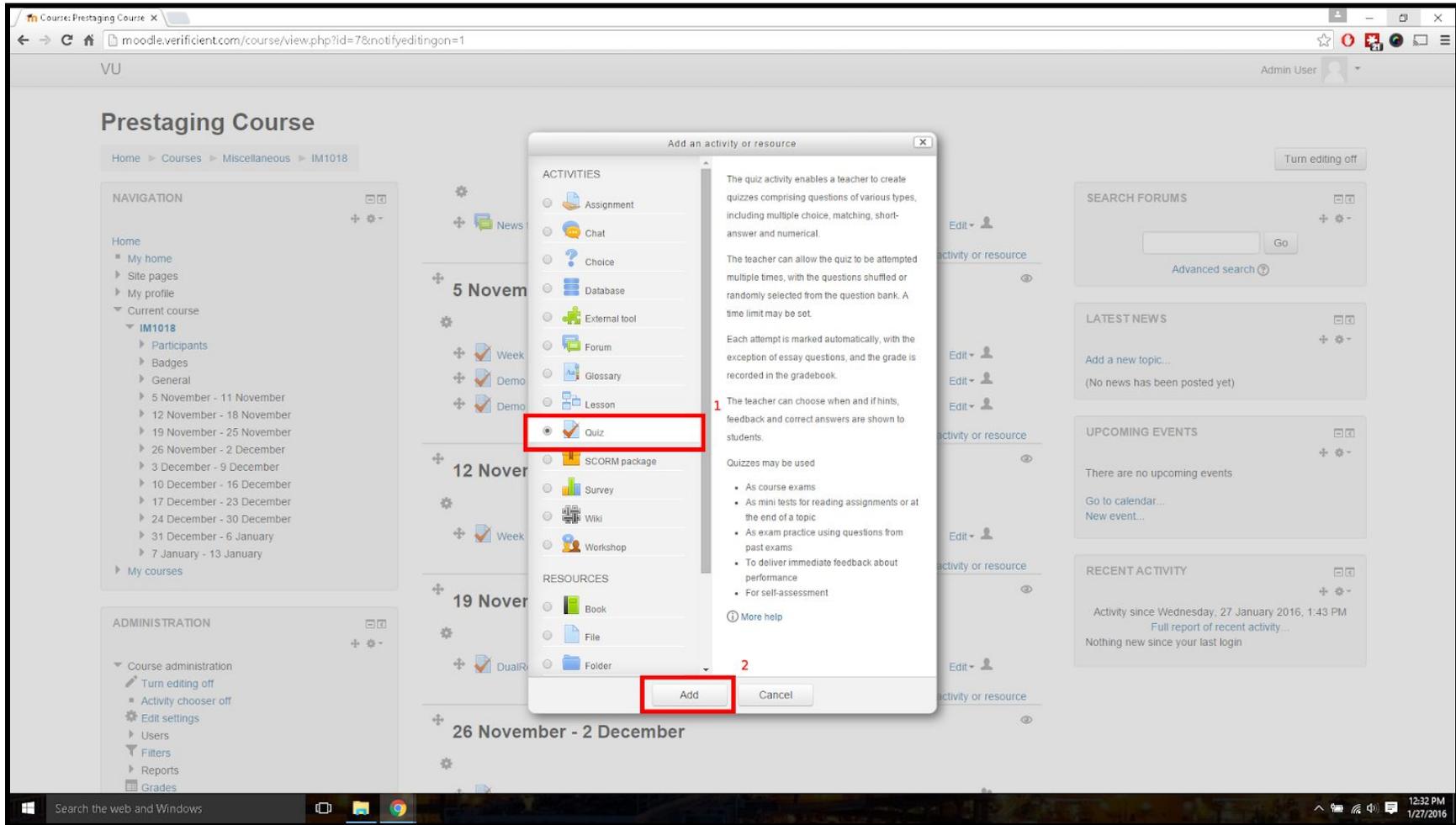
3. Click "Turn editing on" on the right.



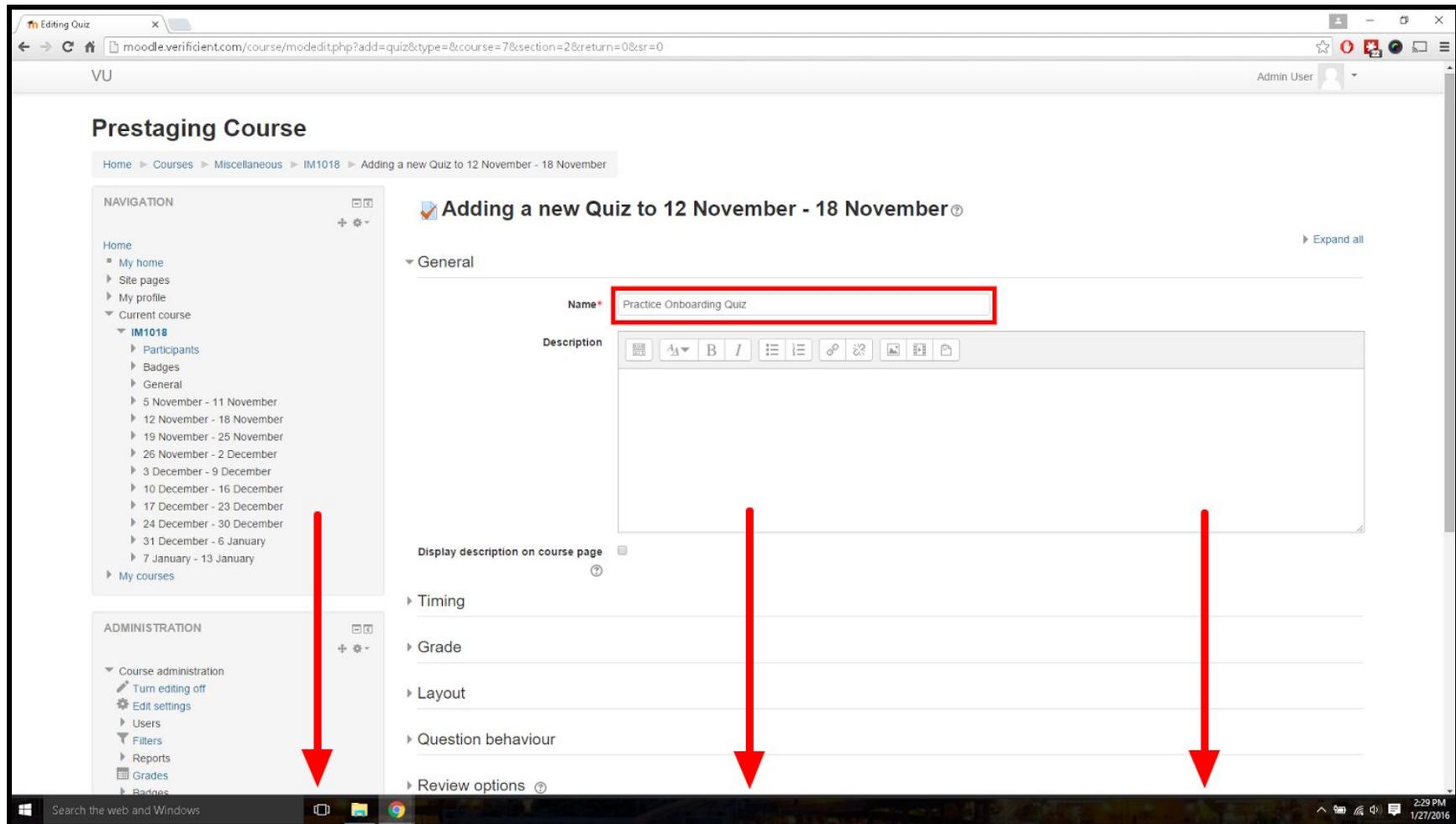
4. Click "Add an activity or resource".



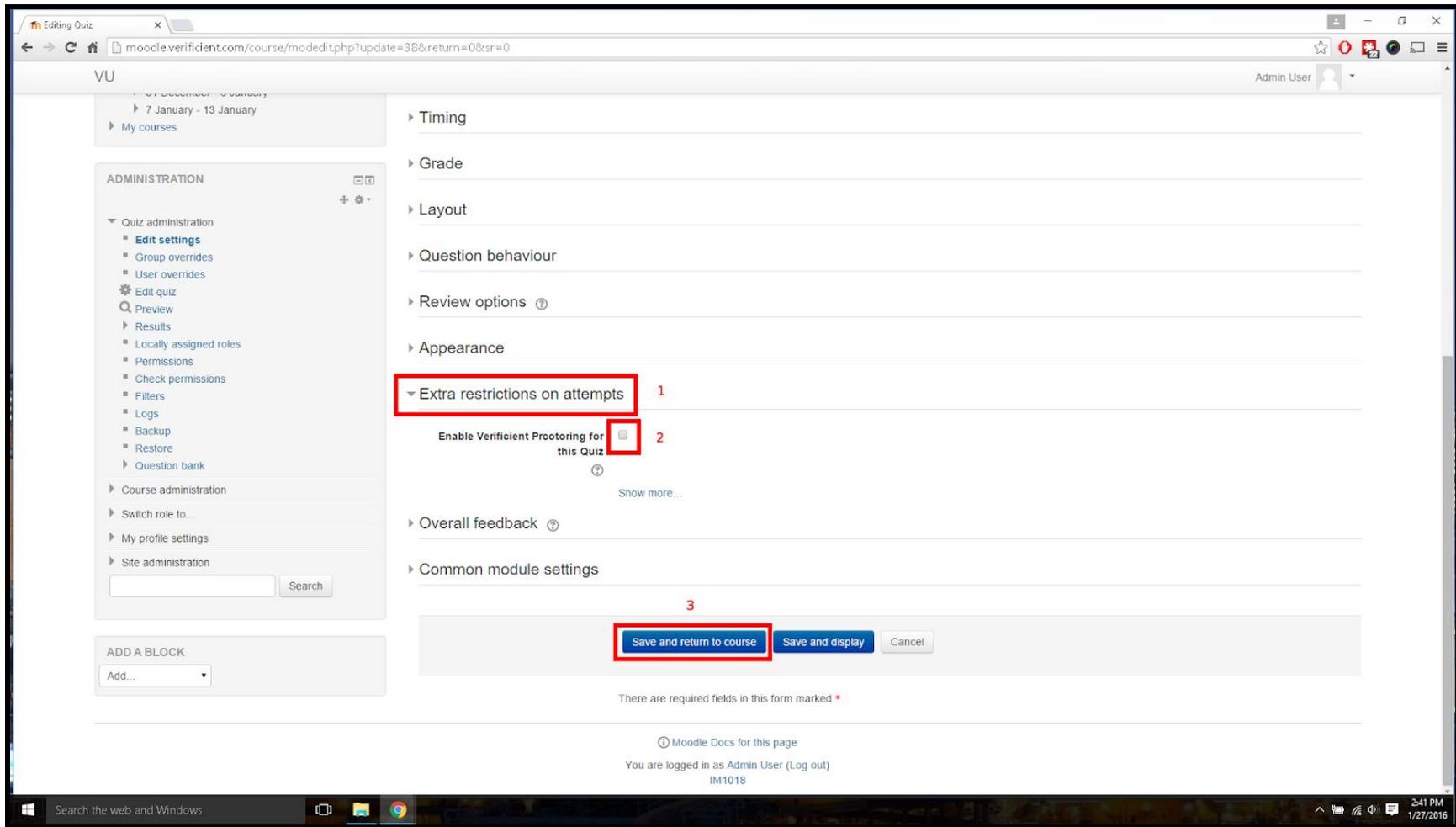
5. Click “Quiz” (1) followed by “Add” (2).



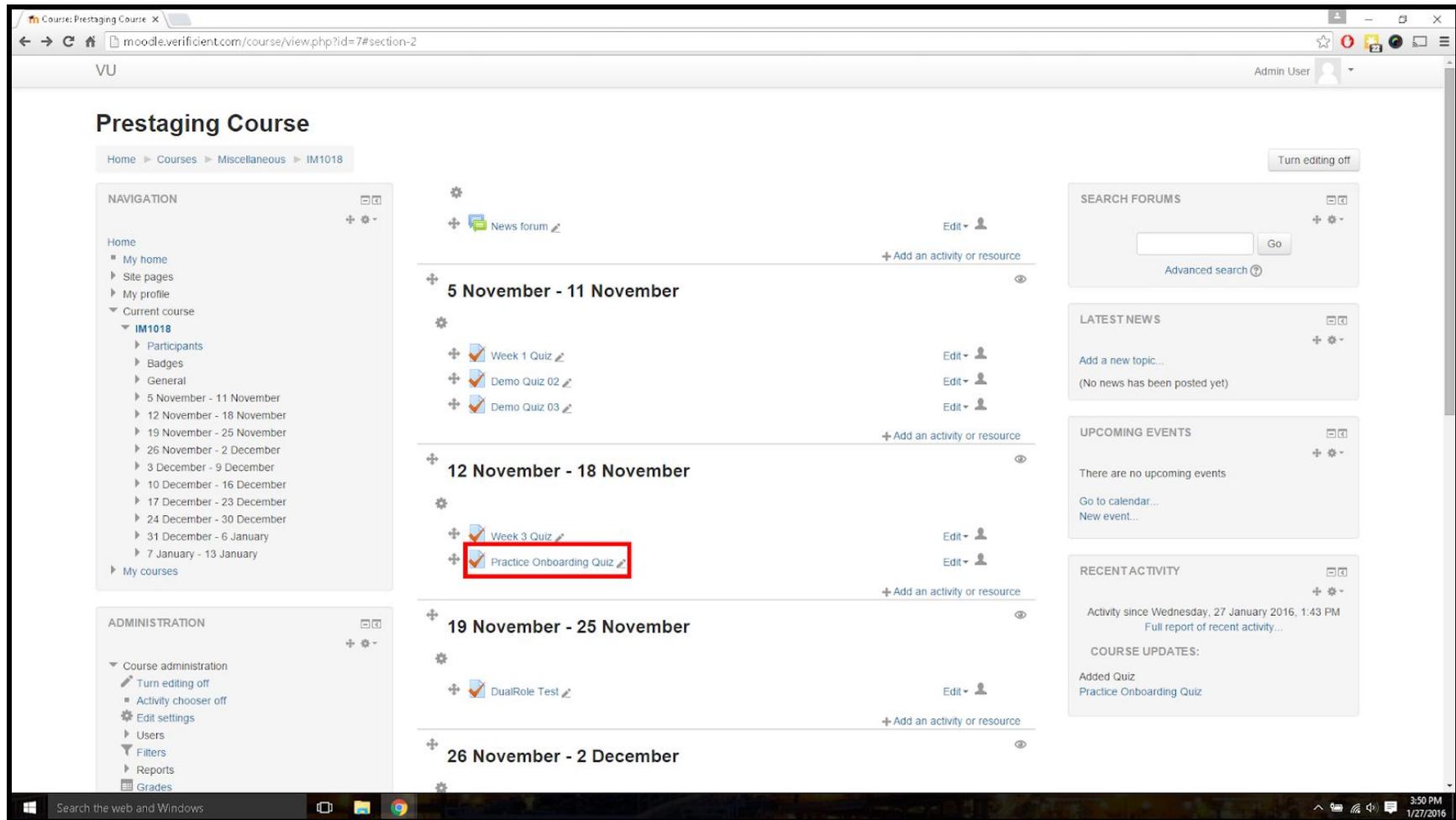
6. Name the quiz as you would like and **scroll** to the bottom of the page.



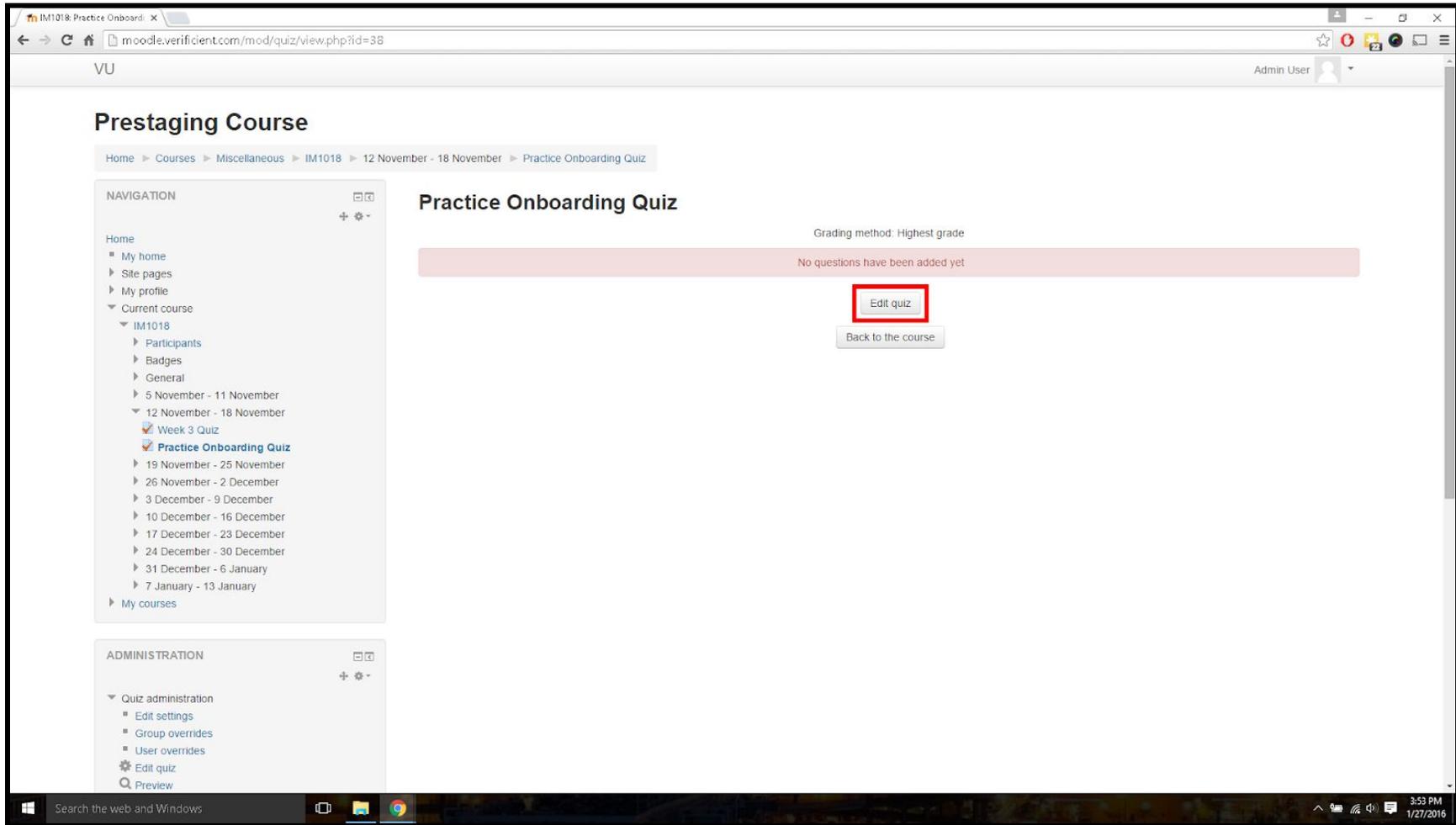
7. Expand the “**Extra restrictions on attempts**” (1) category. A **checkbox** (2) labeled “Enable Verificient Proctoring for this Quiz” will appear. Make sure it’s checked. Click “Show more” to enter the password for the quiz. Finally, click on “**Save and return to course**” (3).



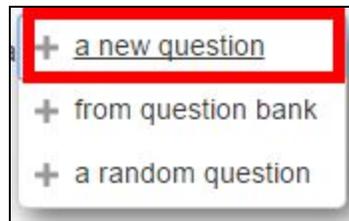
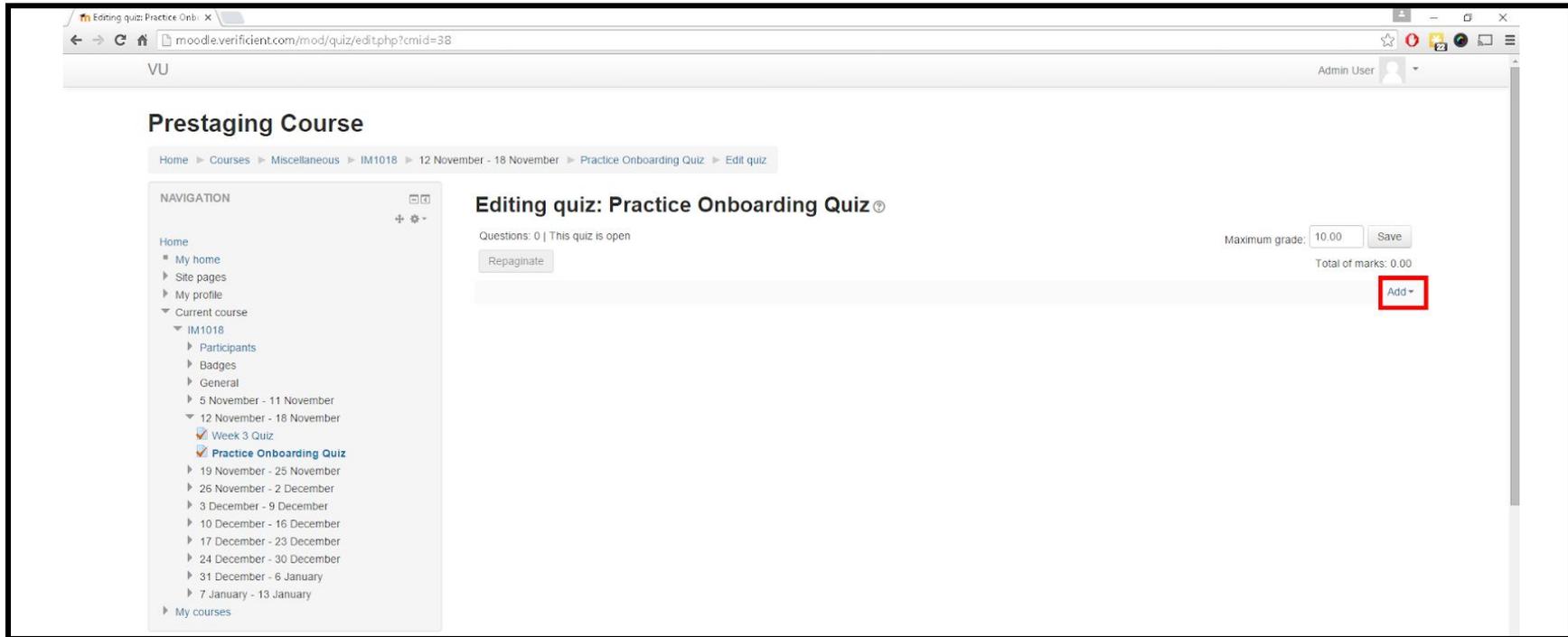
8. The list of assignments in edit mode will be opened up. Find the recently created test in the chosen week and click its name.



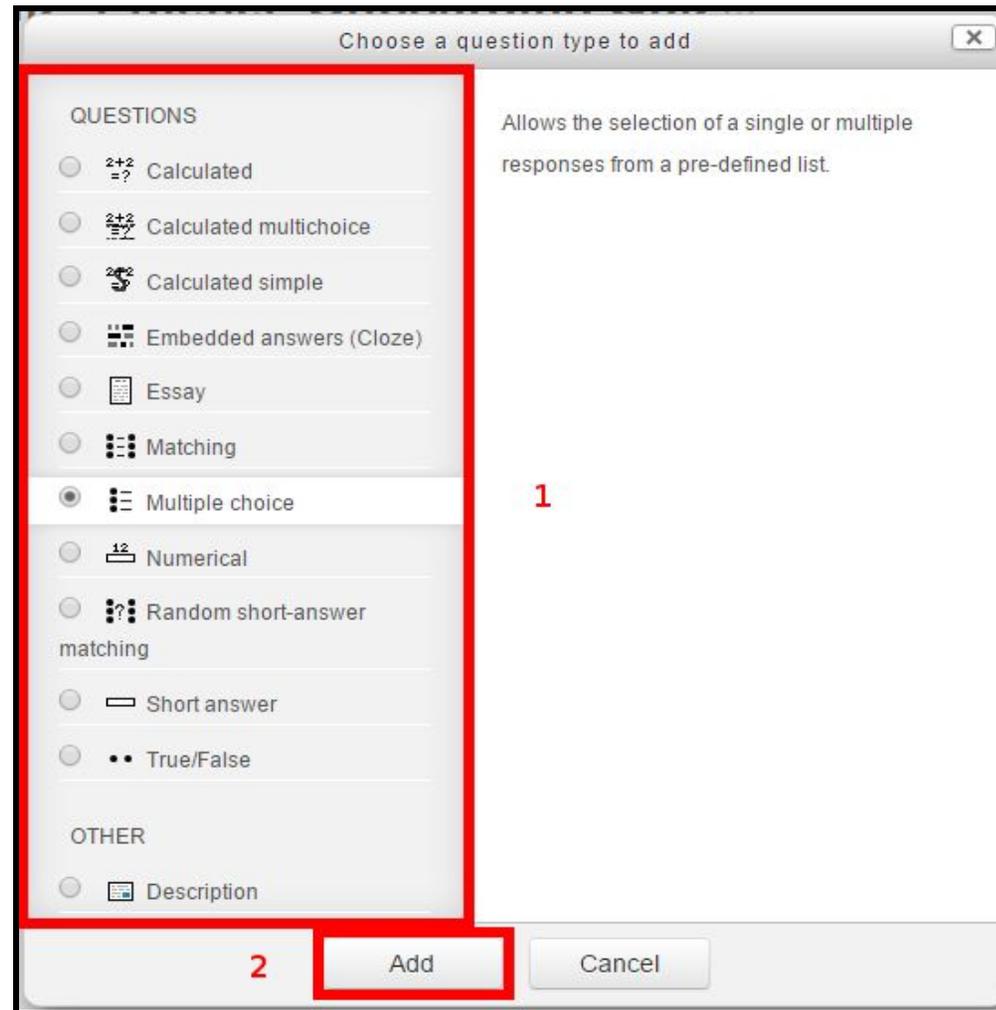
9. Click "Edit quiz".



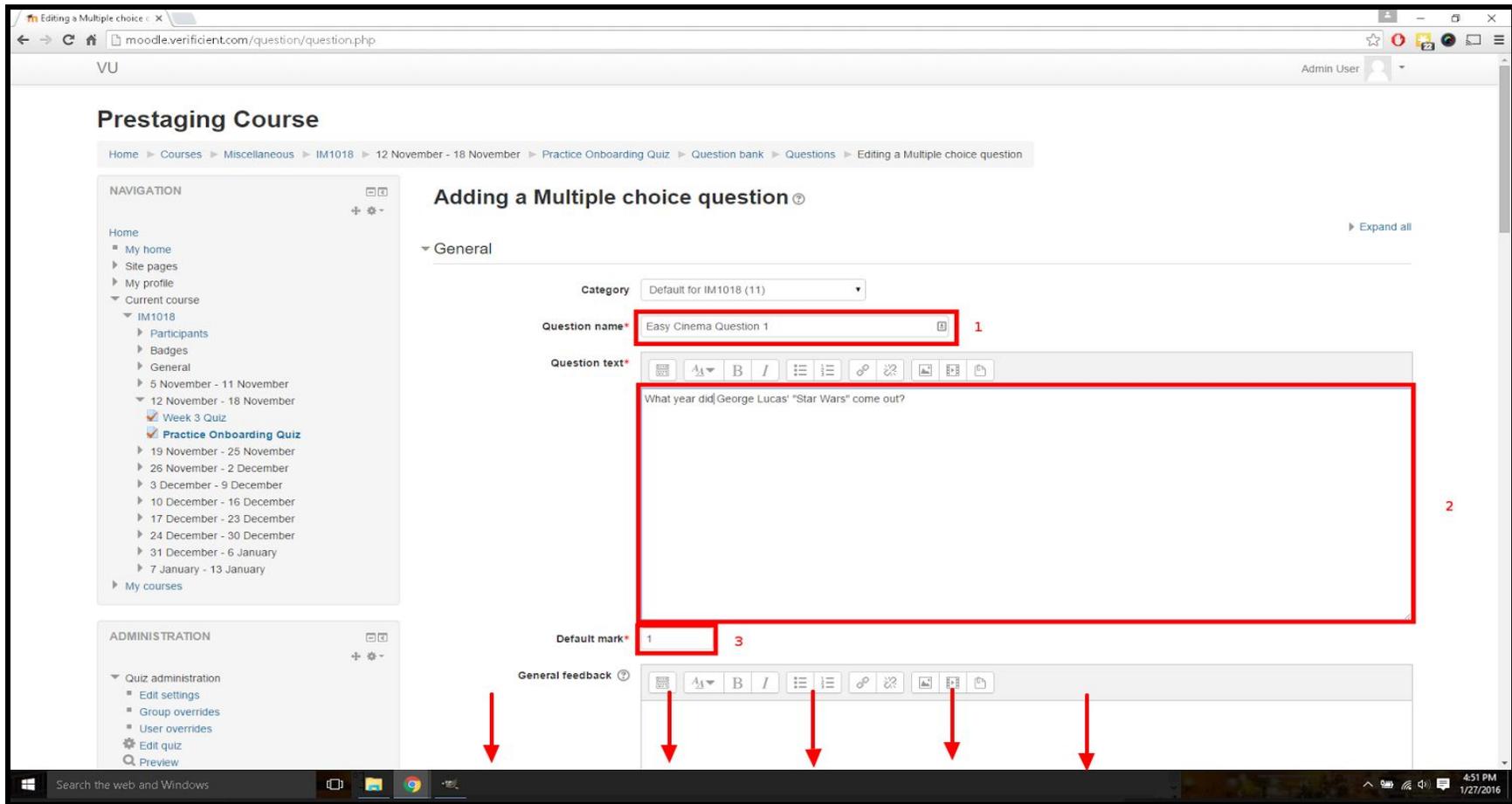
10. Every test needs to have at least one question. Click **“Add”** followed by **“+ a new question”** once it’s shown in the drop-down menu.



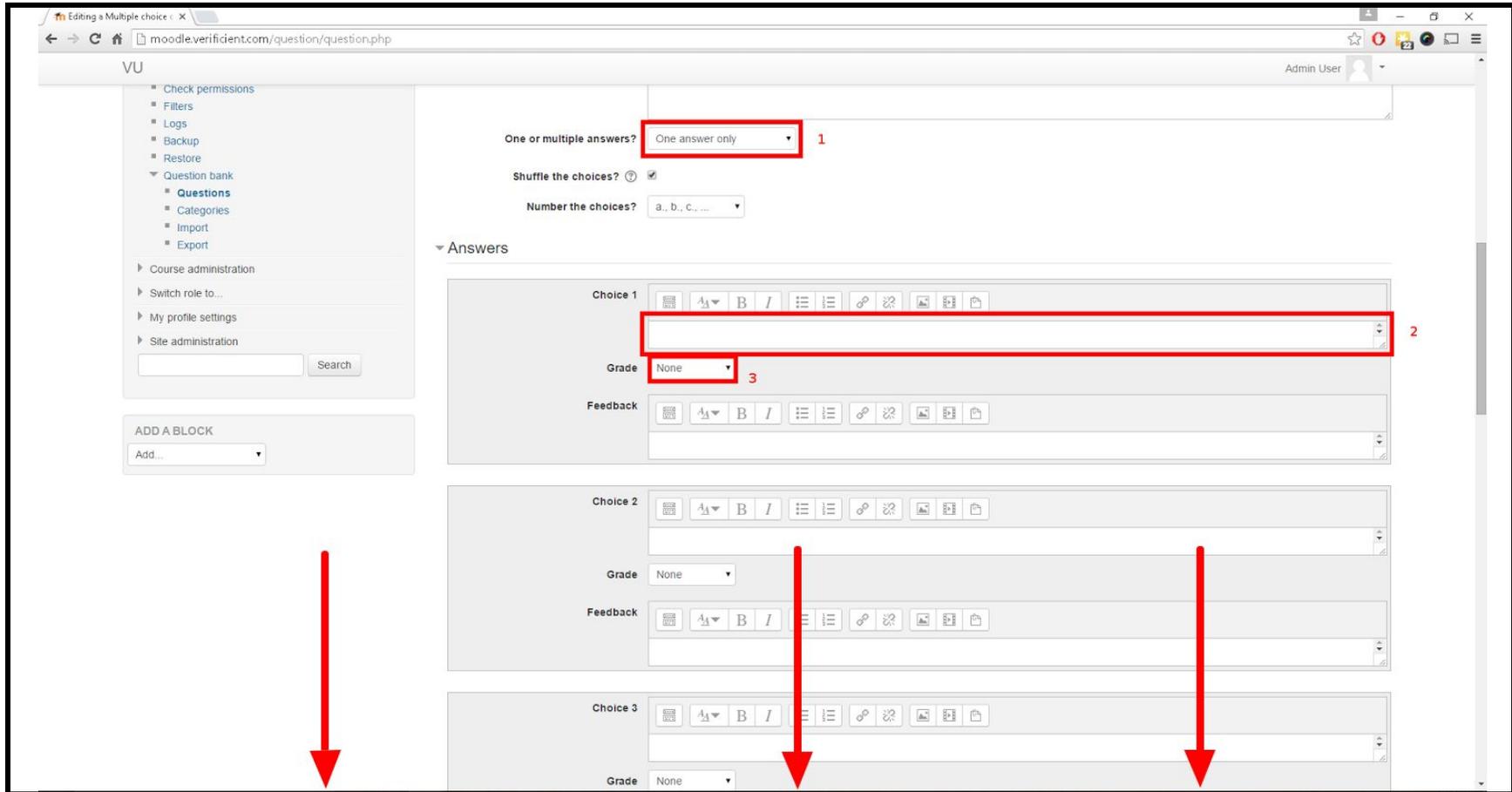
11. From the left pane, choose from a list of **question types (1)**. Here, “Multiple choice” will be chosen for demonstration purposes. After selecting a choice, click “**Add**” (2).



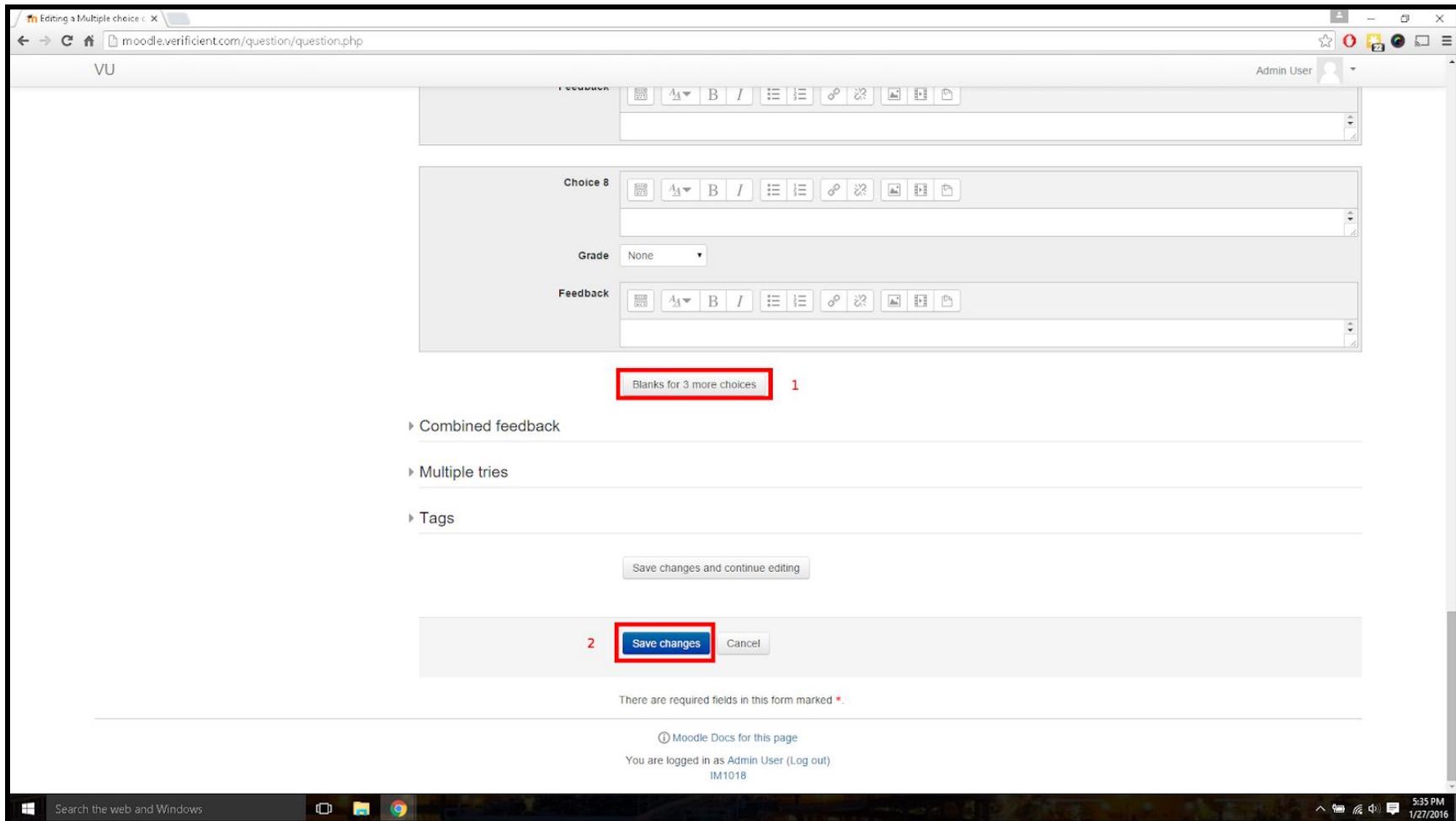
12. This page will look different depending on the question type. What's shown below is the page given for adding a new multiple choice question. Give the question a relevant **name (1)**. Type out the **question (2)** and decide on its **weight (3)**. When done, **scroll down** to continue editing.



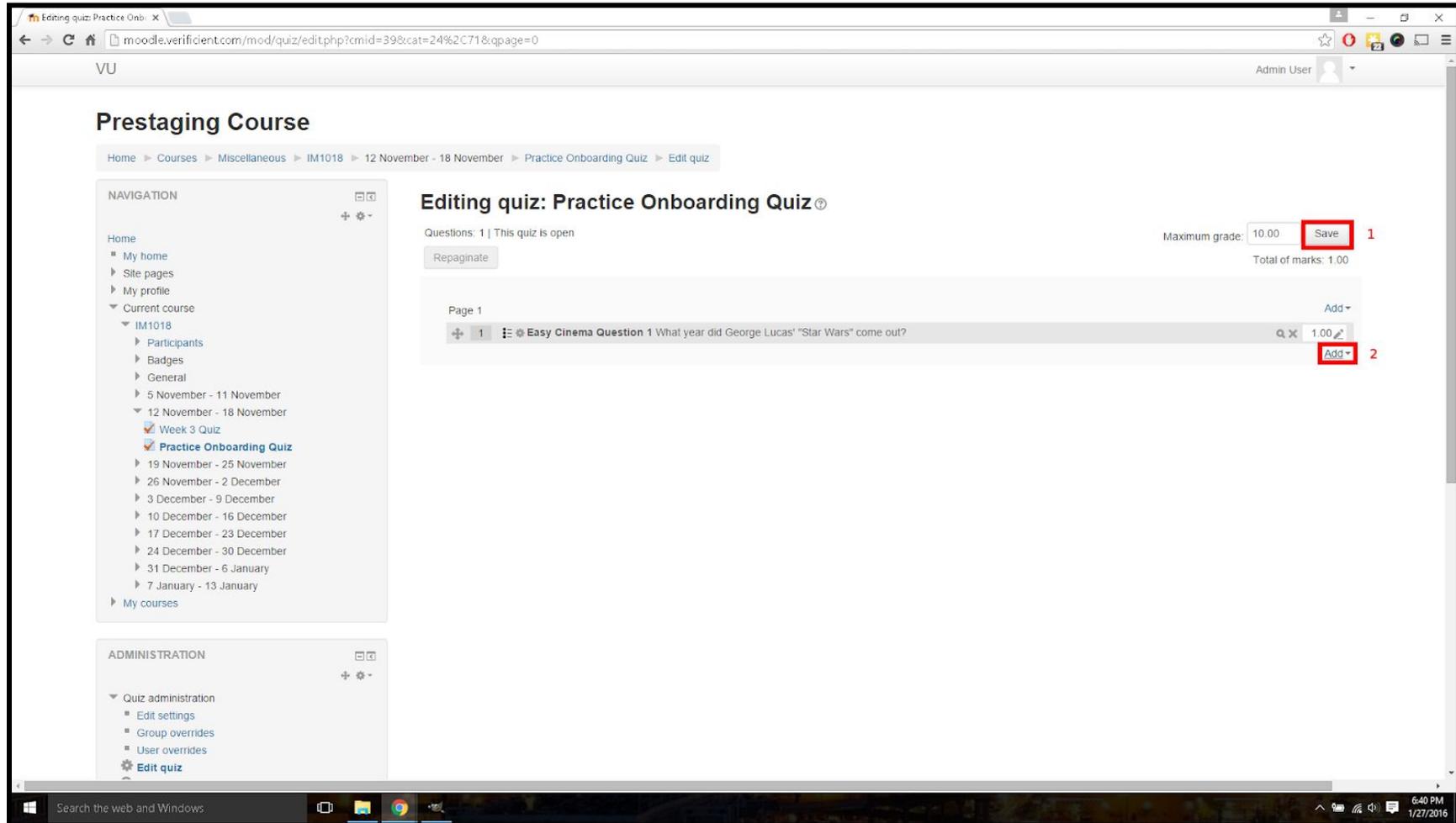
13. It's time to create the possible answers and select correct answer(s). First, decide whether more than one answer will be correct by selecting from the **drop box (1)**. For each answer, type out **its text (2)** and decide whether to give it an **individual weight (3)** or to give it the "Default mark" decided in step 12 by leaving "None" in the drop box. **Scroll down** to find fields for creating more choices.



14. If out of room for adding answers, click **“Blanks for 3 more choices” (1)**. Once satisfied with the question, click **“Save changes” (2)**.

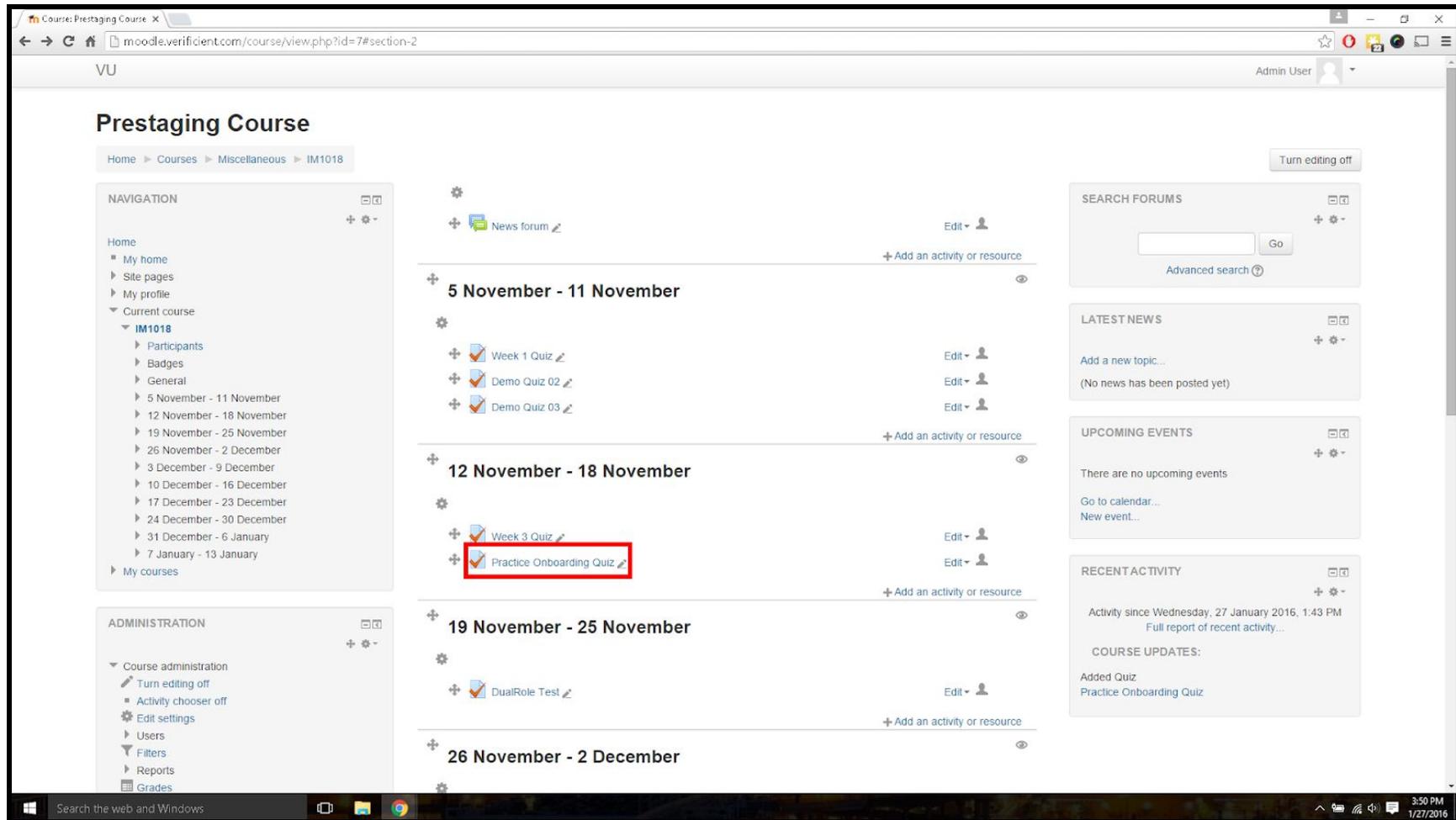
A screenshot of a web browser showing the Moodle question editor interface. The browser address bar shows 'moodle.verificent.com/question/question.php'. The page title is 'VU'. The user is logged in as 'Admin User'. The interface displays a question editor with a 'Feedback' field at the top, followed by a 'Choice 8' section with a 'Grade' dropdown set to 'None' and a 'Feedback' field. Below these are three expandable sections: 'Combined feedback', 'Multiple tries', and 'Tags'. At the bottom of the main content area, there is a button labeled 'Blanks for 3 more choices' with a red box around it and a '1' next to it. Below this is a 'Save changes and continue editing' button. At the very bottom, there is a 'Save changes' button with a red box around it and a 'Cancel' button next to it, with a '2' next to the 'Save changes' button. A message at the bottom of the page states 'There are required fields in this form marked *'. The footer of the page includes 'Moodle Docs for this page', 'You are logged in as Admin User (Log out) IM1018', and a Windows taskbar at the bottom showing the time as 5:35 PM on 1/27/2016.

15. The quiz is now populated with its first question, which is all it needs in order to be taken by students. To finalize the quiz creation process, click **“Save” (1)**. If desired, click **“Add” (2)** to begin creating a new question.

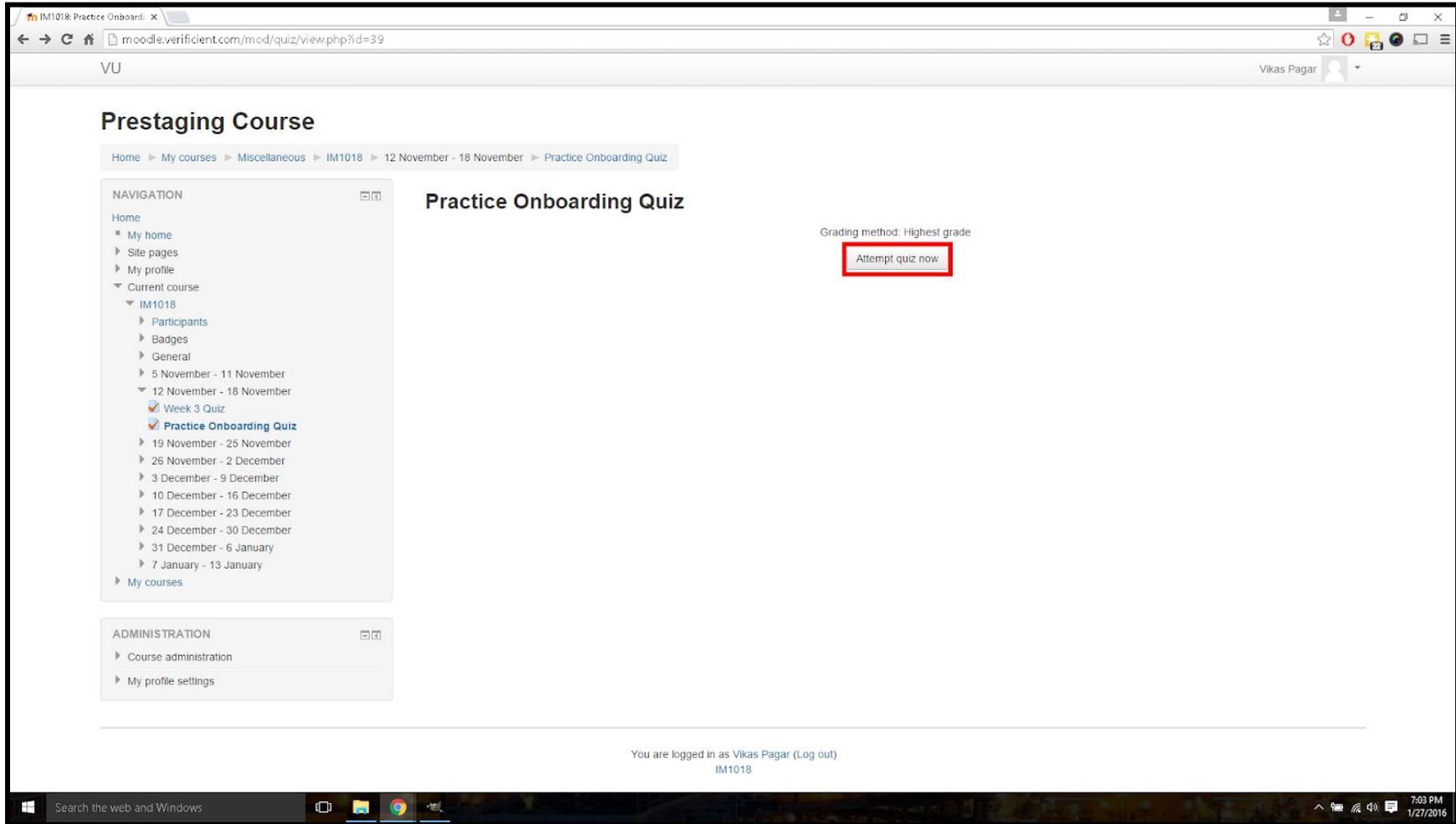


Enabling Proctoring

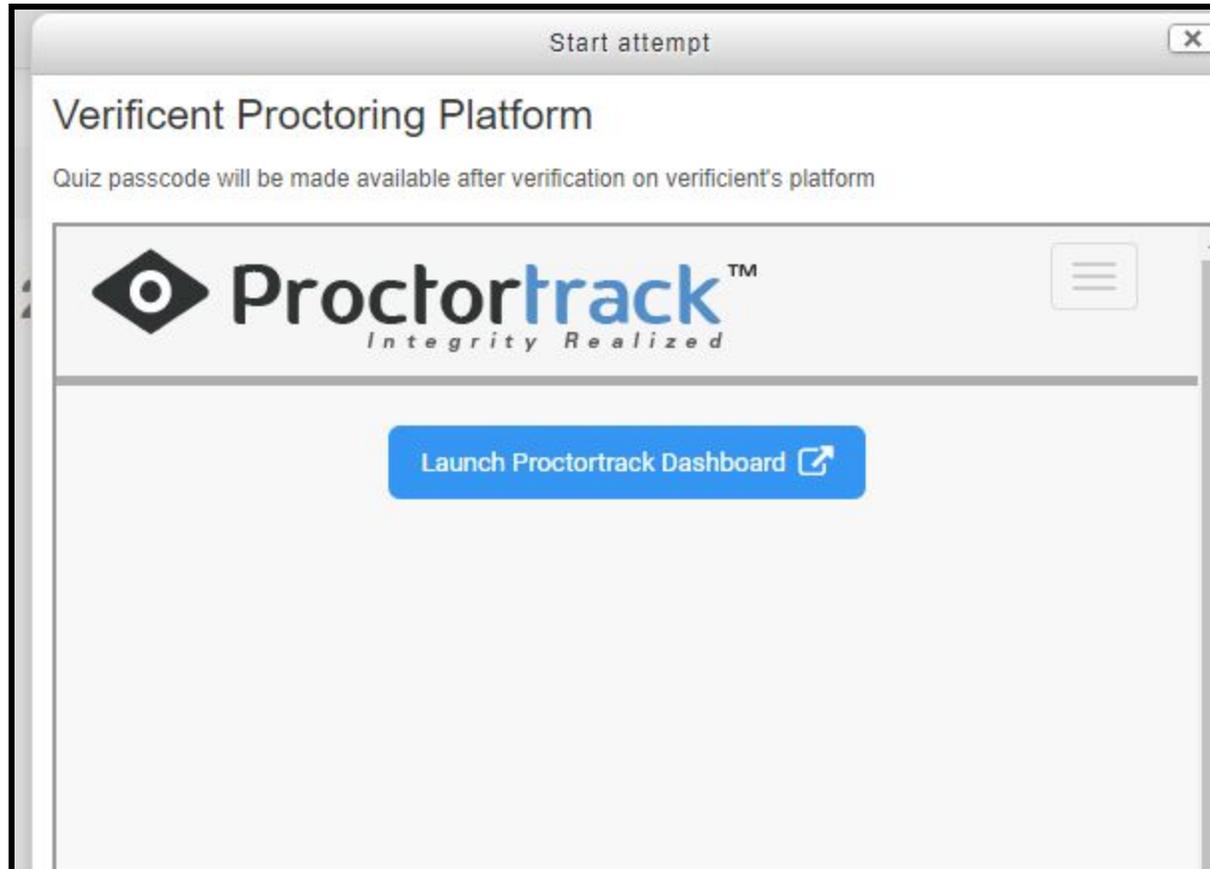
1. Once logged into Moodle, navigate through the course and click on the **Exam link**.



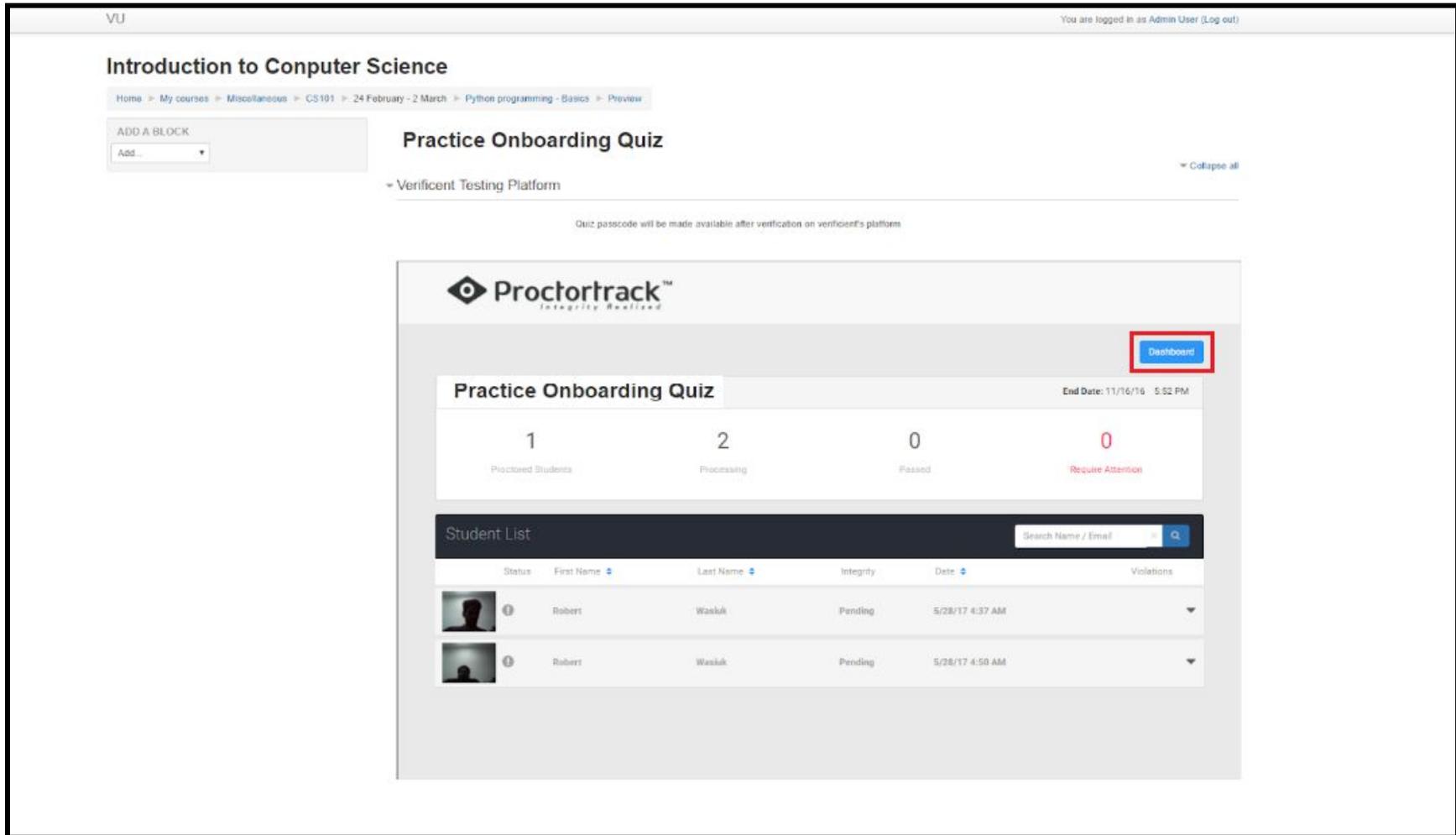
2. Click "Attempt quiz now".



3. Click “Launch Proctortrack Dashboard”.



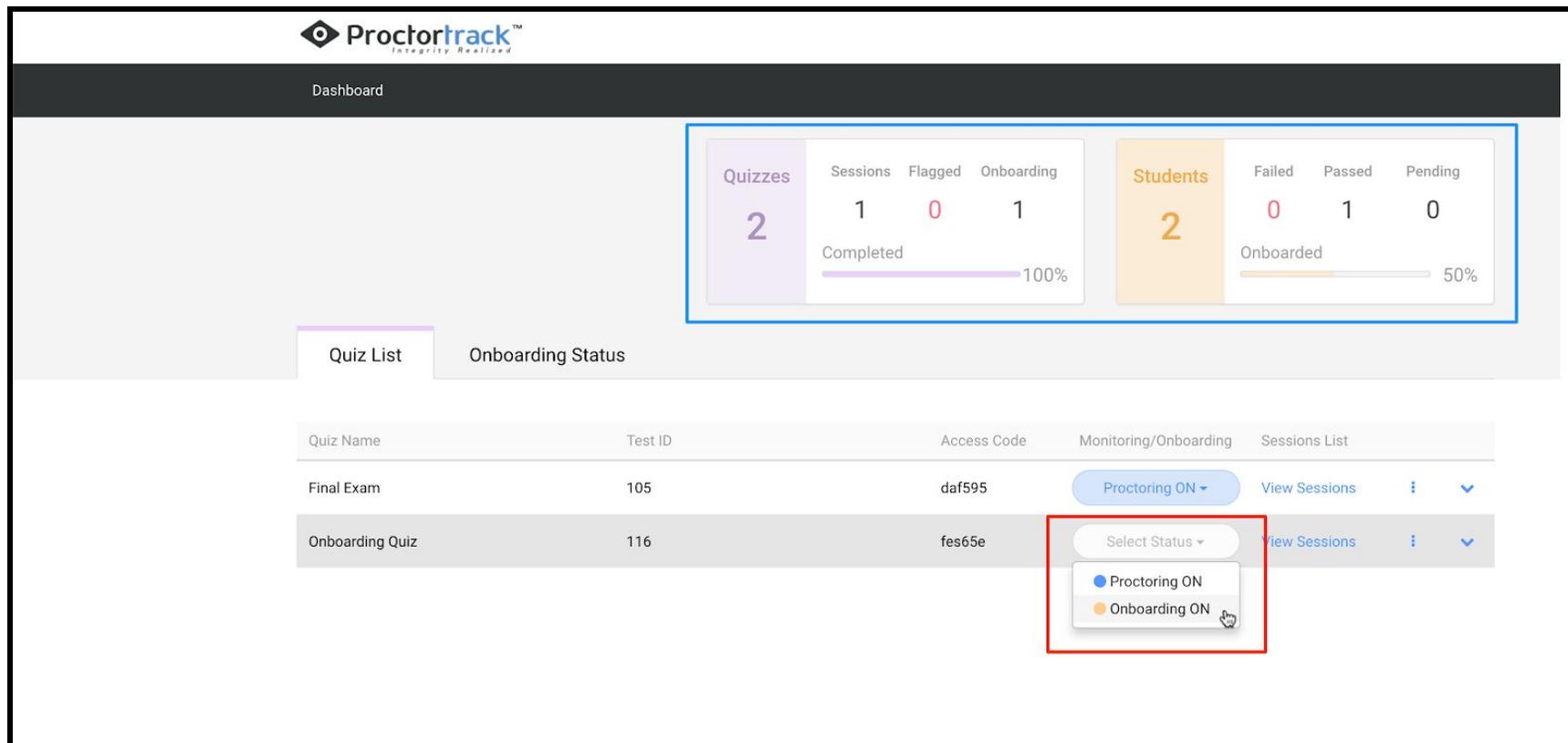
4. Click on the **Dashboard** to go to the Test list on Proctortrack Dashboard.

A screenshot of the Proctortrack dashboard interface. The page title is "Introduction to Computer Science". A breadcrumb trail shows: Home > My courses > Miscellaneous > CS101 > 24 February - 2 March > Python programming - Basics > Preview. On the left, there is an "ADD A BLOCK" section with a dropdown menu. The main content area is titled "Practice Onboarding Quiz" and includes a "Verificent Testing Platform" section with a note: "Quiz passcode will be made available after verification on verificent's platform". Below this is a Proctortrack logo and a "Dashboard" button highlighted with a red box. The dashboard shows a "Practice Onboarding Quiz" summary with statistics: 1 Proctored Students, 2 Processing, 0 Passed, and 0 Require Attention (with a red 0). Below the summary is a "Student List" table with columns for Status, First Name, Last Name, Integrity, Date, and Violations. Two students named Robert Waskuk are listed with a "Pending" status and dates of 5/28/17 4:37 AM and 5/28/17 4:50 AM.

Status	First Name	Last Name	Integrity	Date	Violations
	Robert	Waskuk	Pending	5/28/17 4:37 AM	▼
	Robert	Waskuk	Pending	5/28/17 4:50 AM	▼

5. This is the Proctortrack Dashboard for Instructors. At the top you have the metrics for the Onboarding and all Quizzes. To mark any Quiz as the Onboarding quiz, simply use the drop down menu option on the right of the Quiz name as shown below and click on **“Onboarding On”**.

Onboarding quiz is only a sample quiz and only 1 quiz in the course should be marked as Onboarding.



Proctortrack™
Integrity Realized

Dashboard

Quizzes 2

Sessions	1	Flagged	0	Onboarding	1
Completed	100%				

Students 2

Failed	0	Passed	1	Pending	0
Onboarded	50%				

Quiz List Onboarding Status

Quiz Name	Test ID	Access Code	Monitoring/Onboarding	Sessions List
Final Exam	105	daf595	Proctoring ON	View Sessions
Onboarding Quiz	116	fes65e	Select Status	View Sessions

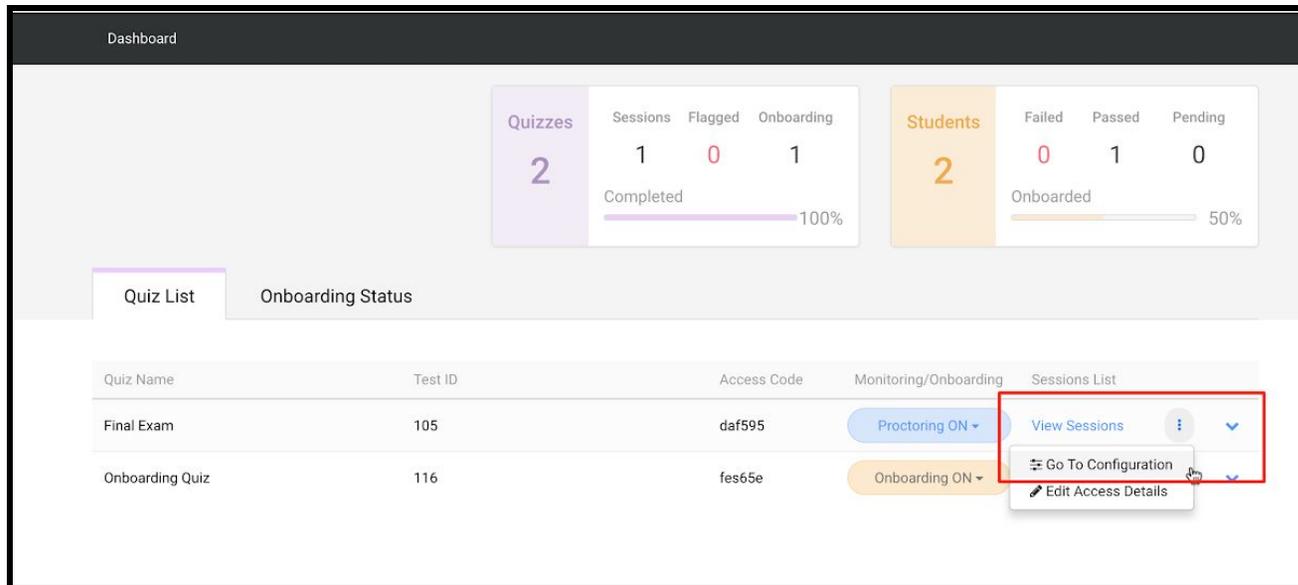
Select Status

- Proctoring ON
- Onboarding ON

That's it! You have successfully set up the quizzes for Proctoring.

Test Configuration using Proctortrack.

1. On the Proctortrack Dashboard, click on the **3 dots** on the right of the quiz name for which the configuration needs to be set and select **“Go to Configuration”**

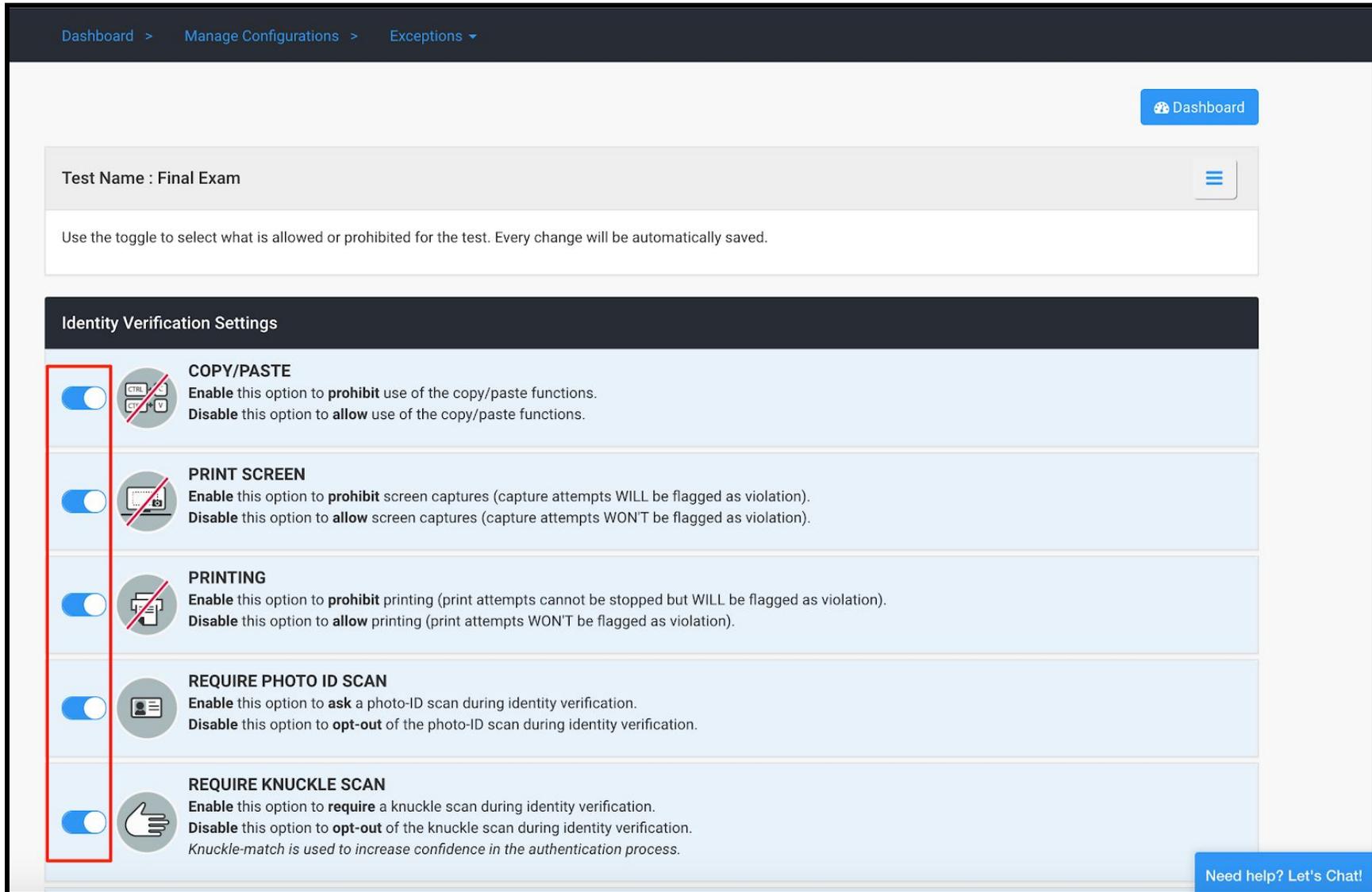


The screenshot shows the Proctortrack Dashboard with two summary cards: Quizzes (2 total, 1 completed, 0 flagged, 1 onboarding) and Students (2 total, 0 failed, 1 passed, 0 pending). Below these are tabs for Quiz List and Onboarding Status. A table lists quizzes with columns for Quiz Name, Test ID, Access Code, Monitoring/Onboarding, and Sessions List. A red box highlights the 'Go To Configuration' option in the dropdown menu for the 'Final Exam' quiz.

Quiz Name	Test ID	Access Code	Monitoring/Onboarding	Sessions List
Final Exam	105	daf595	Proctoring ON	View Sessions Go To Configuration Edit Access Details
Onboarding Quiz	116	fes65e	Onboarding ON	

By default all quizzes are configured as closed book quizzes/exams. Each quiz/exam can have different configuration.

2. Enable the **Identity Verification Settings** as desired using the **toggle** option
 - a) Snapshot 1 of Identity Verification Settings



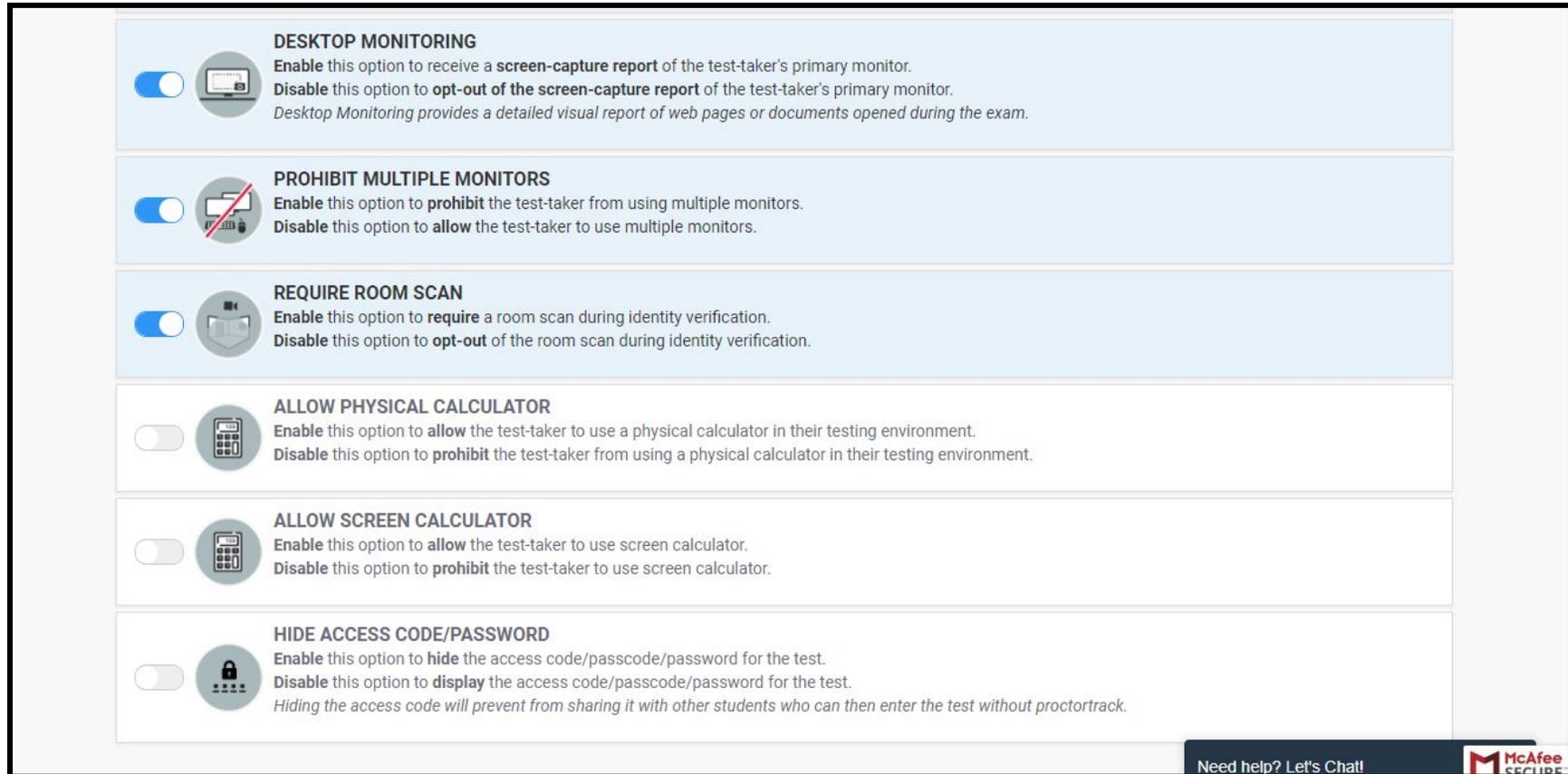
The screenshot shows a web interface for managing configurations. At the top, there is a breadcrumb trail: Dashboard > Manage Configurations > Exceptions. A blue button labeled 'Dashboard' is in the top right. Below the breadcrumb, a grey box contains 'Test Name : Final Exam' and a hamburger menu icon. A white box below that contains the text: 'Use the toggle to select what is allowed or prohibited for the test. Every change will be automatically saved.'

The main section is titled 'Identity Verification Settings' in a dark header. It contains five settings, each with a toggle switch, an icon, and a title. A red box highlights the first three settings: COPY/PASTE, PRINT SCREEN, and PRINTING. The settings are:

- COPY/PASTE**: Enable this option to **prohibit** use of the copy/paste functions. Disable this option to **allow** use of the copy/paste functions.
- PRINT SCREEN**: Enable this option to **prohibit** screen captures (capture attempts WILL be flagged as violation). Disable this option to **allow** screen captures (capture attempts WON'T be flagged as violation).
- PRINTING**: Enable this option to **prohibit** printing (print attempts cannot be stopped but WILL be flagged as violation). Disable this option to **allow** printing (print attempts WON'T be flagged as violation).
- REQUIRE PHOTO ID SCAN**: Enable this option to **ask** a photo-ID scan during identity verification. Disable this option to **opt-out** of the photo-ID scan during identity verification.
- REQUIRE KNUCKLE SCAN**: Enable this option to **require** a knuckle scan during identity verification. Disable this option to **opt-out** of the knuckle scan during identity verification. *Knuckle-match is used to increase confidence in the authentication process.*

A blue button labeled 'Need help? Let's Chat!' is in the bottom right corner.

b) Snapshot 2 of Identity Verification settings



The screenshot displays a settings interface with six toggleable options, each with an icon and explanatory text:

- DESKTOP MONITORING** (Icon: monitor with capture): Enable this option to receive a **screen-capture report** of the test-taker's primary monitor. Disable this option to **opt-out of the screen-capture report** of the test-taker's primary monitor. Desktop Monitoring provides a detailed visual report of web pages or documents opened during the exam.
- PROHIBIT MULTIPLE MONITORS** (Icon: multiple monitors with a slash): Enable this option to **prohibit** the test-taker from using multiple monitors. Disable this option to **allow** the test-taker to use multiple monitors.
- REQUIRE ROOM SCAN** (Icon: room scan): Enable this option to **require** a room scan during identity verification. Disable this option to **opt-out** of the room scan during identity verification.
- ALLOW PHYSICAL CALCULATOR** (Icon: physical calculator): Enable this option to **allow** the test-taker to use a physical calculator in their testing environment. Disable this option to **prohibit** the test-taker from using a physical calculator in their testing environment.
- ALLOW SCREEN CALCULATOR** (Icon: screen calculator): Enable this option to **allow** the test-taker to use screen calculator. Disable this option to **prohibit** the test-taker to use screen calculator.
- HIDE ACCESS CODE/PASSWORD** (Icon: lock with dots): Enable this option to **hide** the access code/passcode/password for the test. Disable this option to **display** the access code/passcode/password for the test. Hiding the access code will prevent from sharing it with other students who can then enter the test without proctortrack.

At the bottom right of the interface, there is a chat button labeled "Need help? Let's Chat!" and a McAfee SECURE logo.

Students will be requested to show their face and YU-card to validate identity, per the same structure that occurs during an in-person exam.

Should a student not have a YU-card, government issued ID can be displayed to the camera, showing only the picture and name (all other information can be covered by you). Students will not be asked invasive personal questions, such as their government-issued identifiers (e.g. social insurance number, passport number). The access to this information is restricted to the instructor when they download the files and until that point this information will be securely stored on Proctortrack's Canadian servers.

York University will not require a room scan or knuckle scan through Proctortrack.

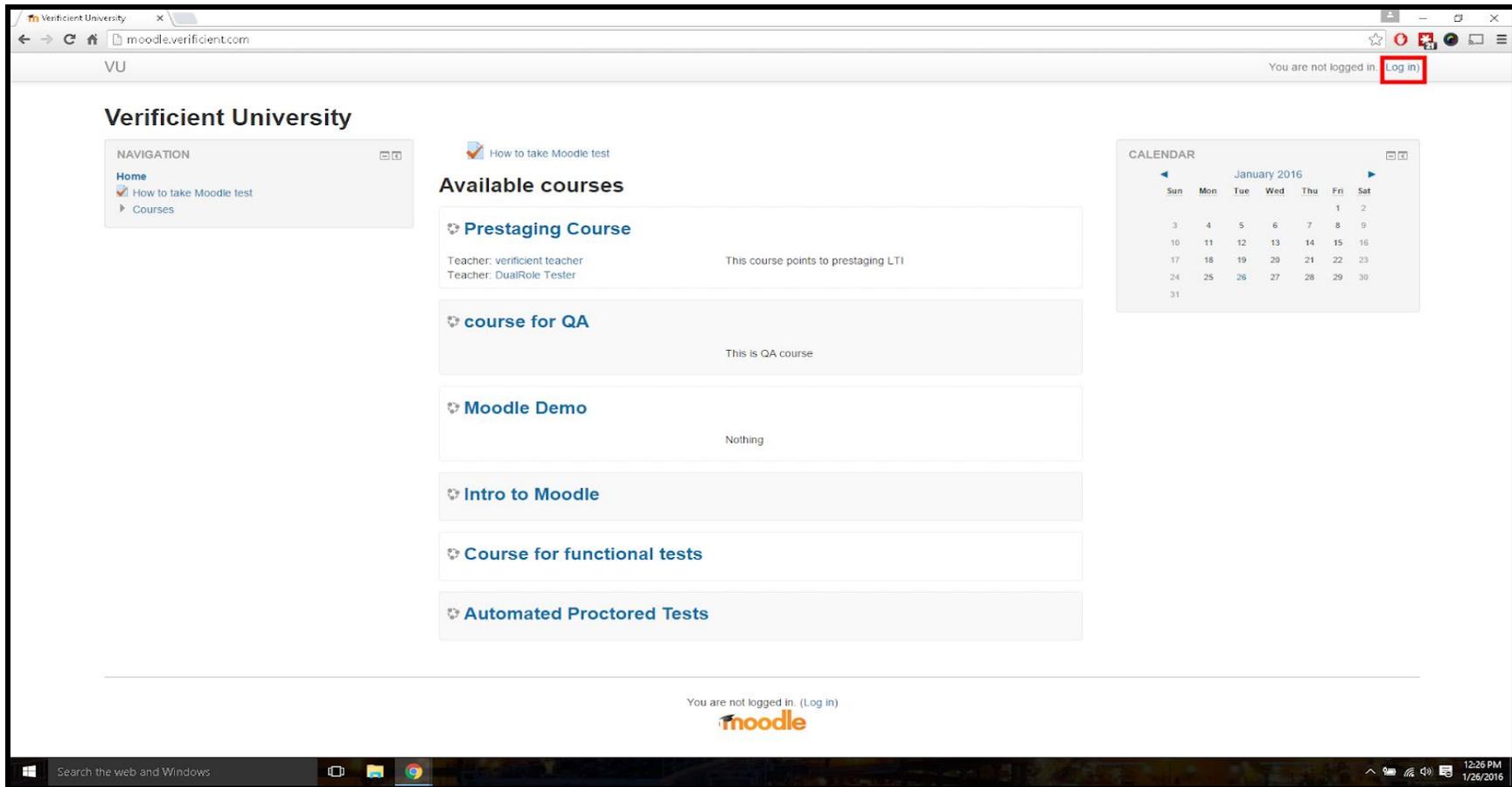
3. Configure the “Test settings” as desired using the **toggle** options.

Test Settings

-  **ALLOW PHYSICAL BOOKS**
Enable this option to **allow** the test-taker to refer to their books during the test.
Disable this option to **prohibit** the test-taker from referring to their books during the test.
-  **ALLOW ONLINE/DIGITAL RESOURCES**
Enable this option to **allow** the use of online (e.g. web content) or digital resources (PDF, DOCs) during the test.
Disable this option to **prohibit** the use of online or digital resources during the test.
-  **ALLOW DIGITAL NOTES**
Enable this option to **allow** the test-taker to take notes on their computer during the test.
Disable this option to **prohibit** the test-taker from taking notes on their computer during the test.
-  **ALLOW HANDWRITTEN NOTES**
Enable this option to **allow** the test-taker to take notes by hand during the test.
Disable this option to **prohibit** the test-taker from taking notes by hand during the test.
-  **ALLOW STUDENTS TO TAKE SCANS OR PICTURES USING PHONE**
Enable this option to **allow** the test-taker to take scans or pictures using phone during the test.
Disable this option to **prohibit** the test-taker from taking scans or pictures using phone
-  **ALLOW STUDENTS TO TAKE SCANS OR UPLOAD DOCUMENTS**
Enable this option to **allow** the test-taker to take scans or upload document during the test.
Disable this option to **prohibit** the test-taker from taking scans or upload the document
-  **ALLOW STUDENTS TO USE EARPHONES**
Enable this option to **allow** the test-taker to use earphones during the test.
Disable this option to **prohibit** the test-taker from using earphones

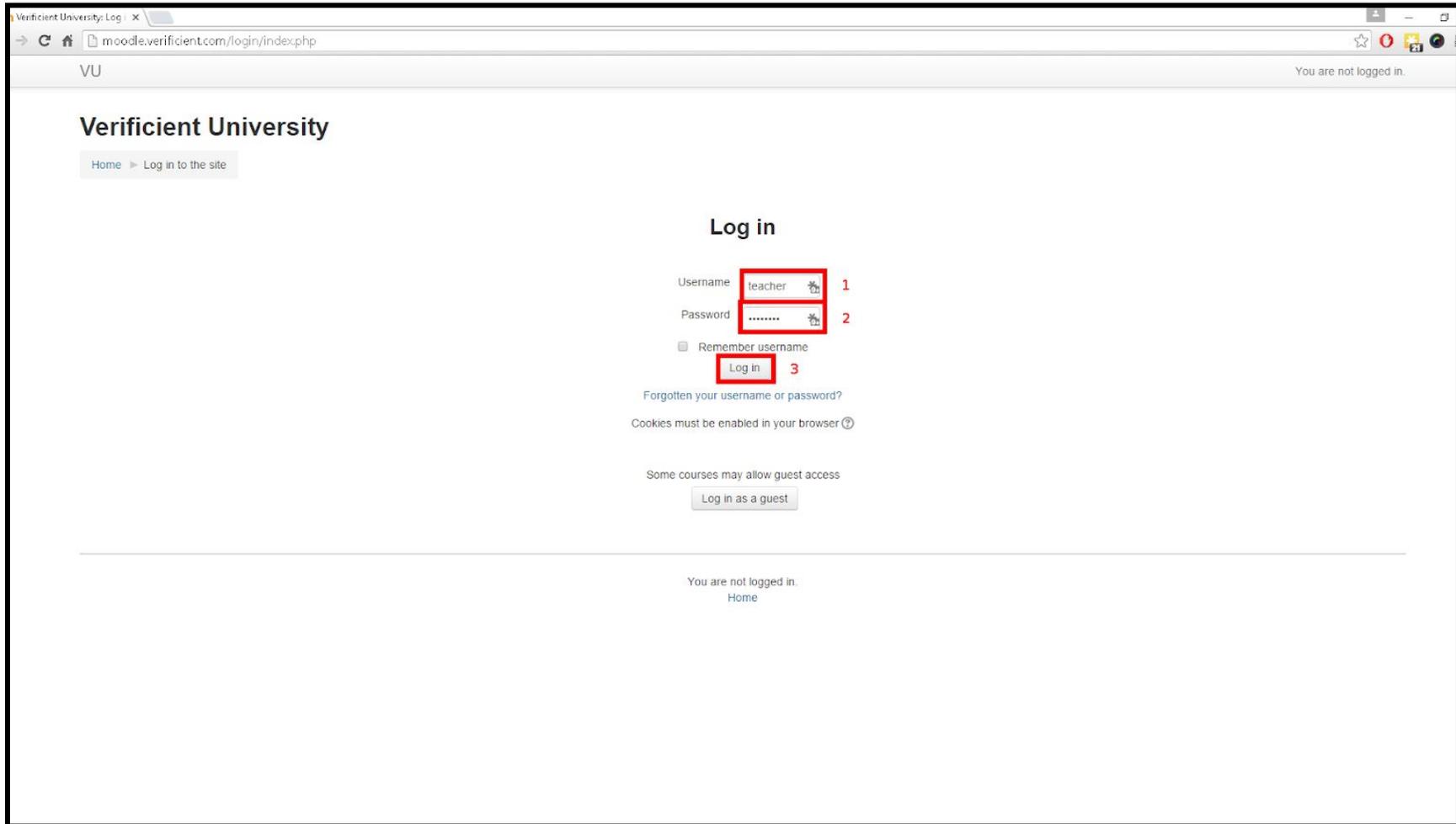
Reviewing the Results of a Quiz

1. On the upper right corner on the initial screen, click “Log in”.

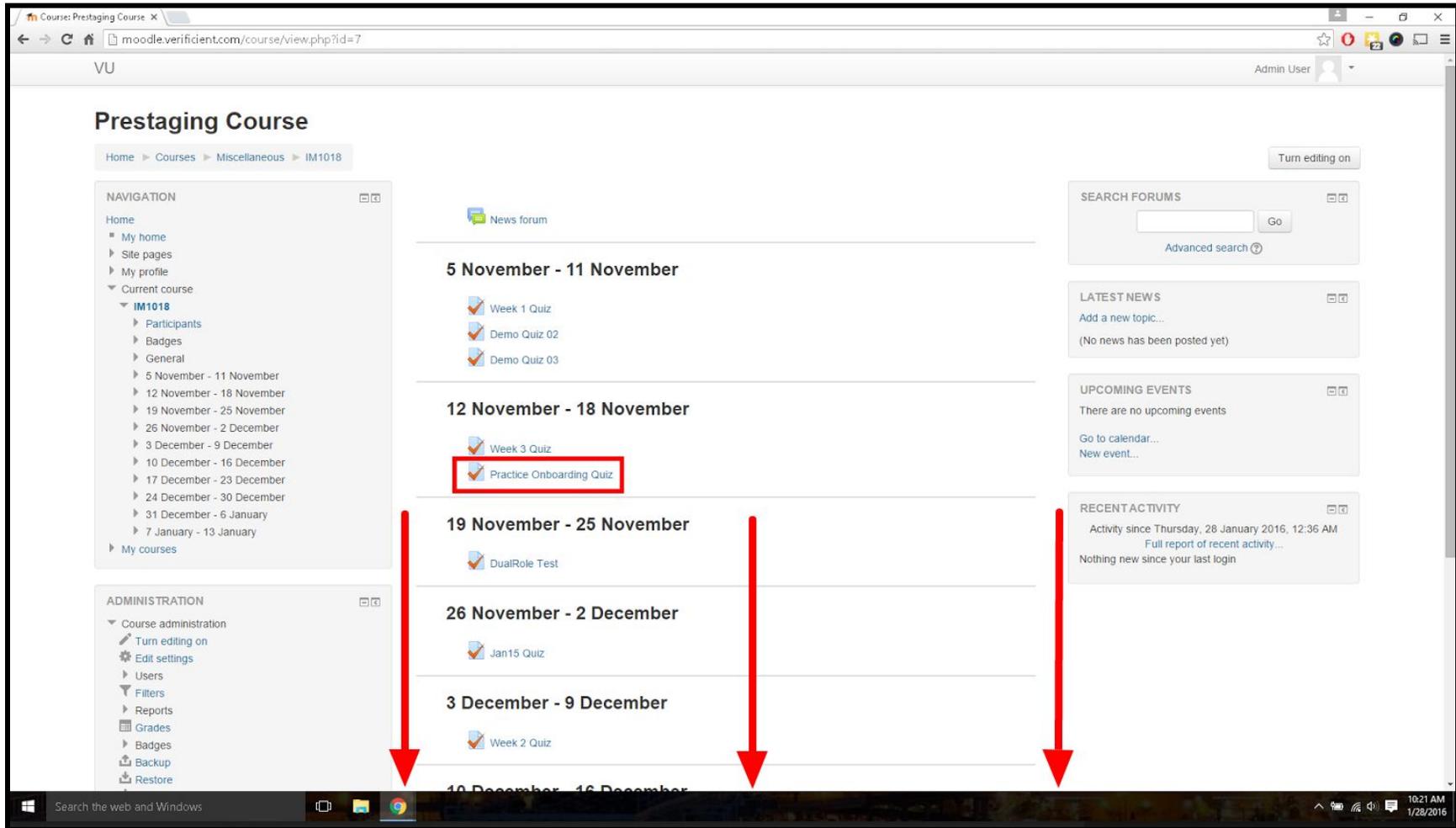


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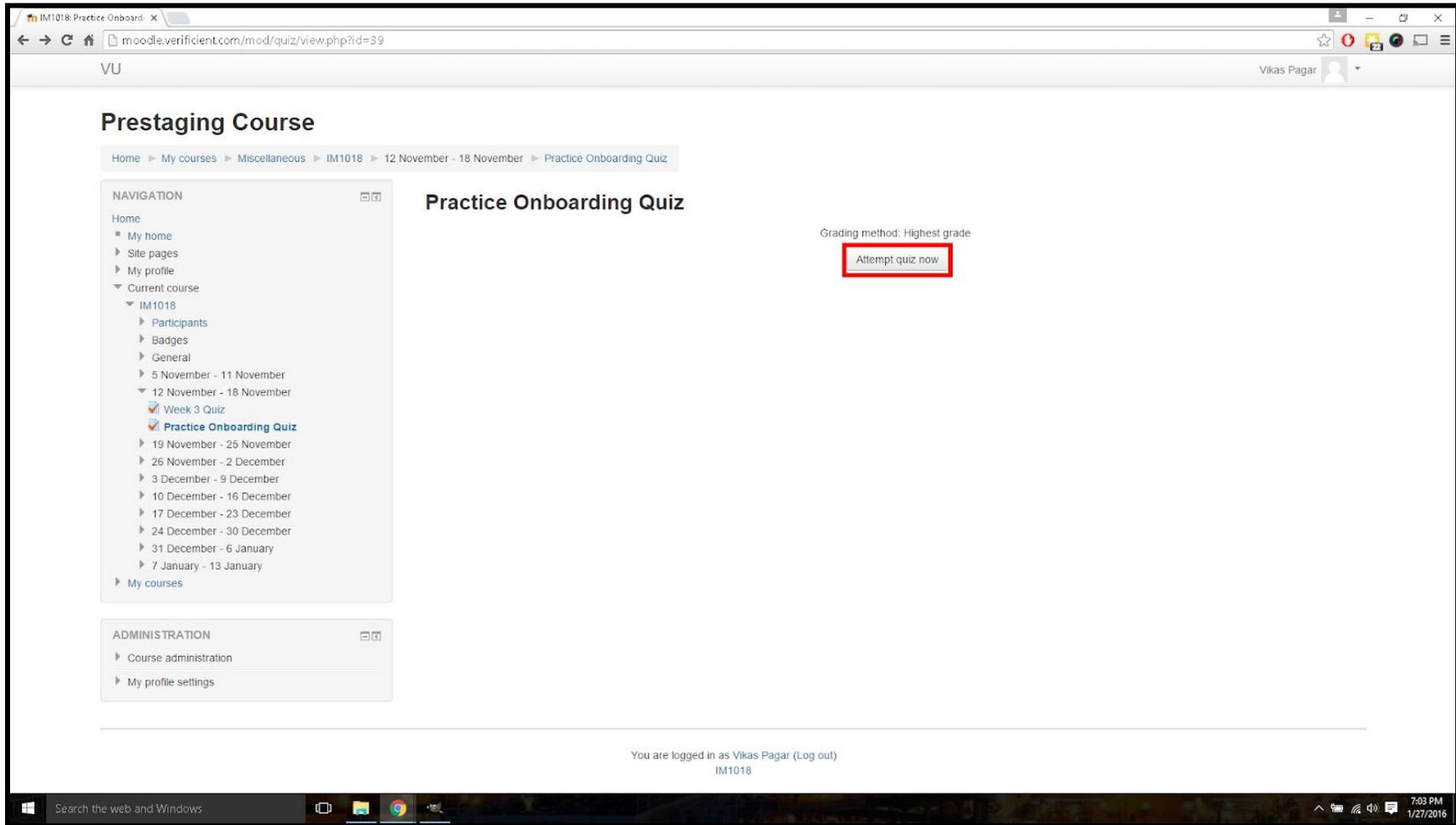
2. Log in to Moodle as an instructor or admin by entering a **Username (1)** and the corresponding **Password (2)** before clicking **“Log In” (3)**.



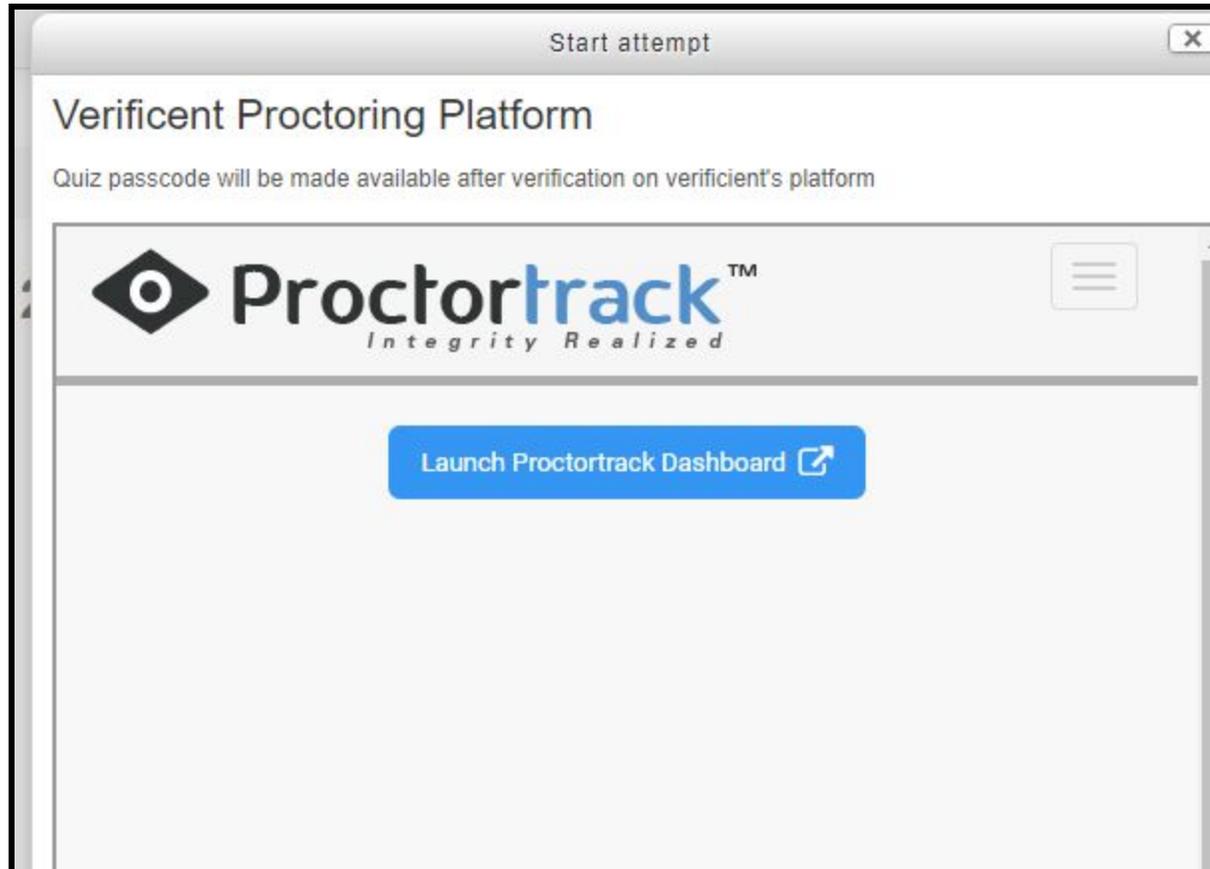
3. Click on the **quiz** for which the results are to be reviewed. It may be necessary to **scroll down**.



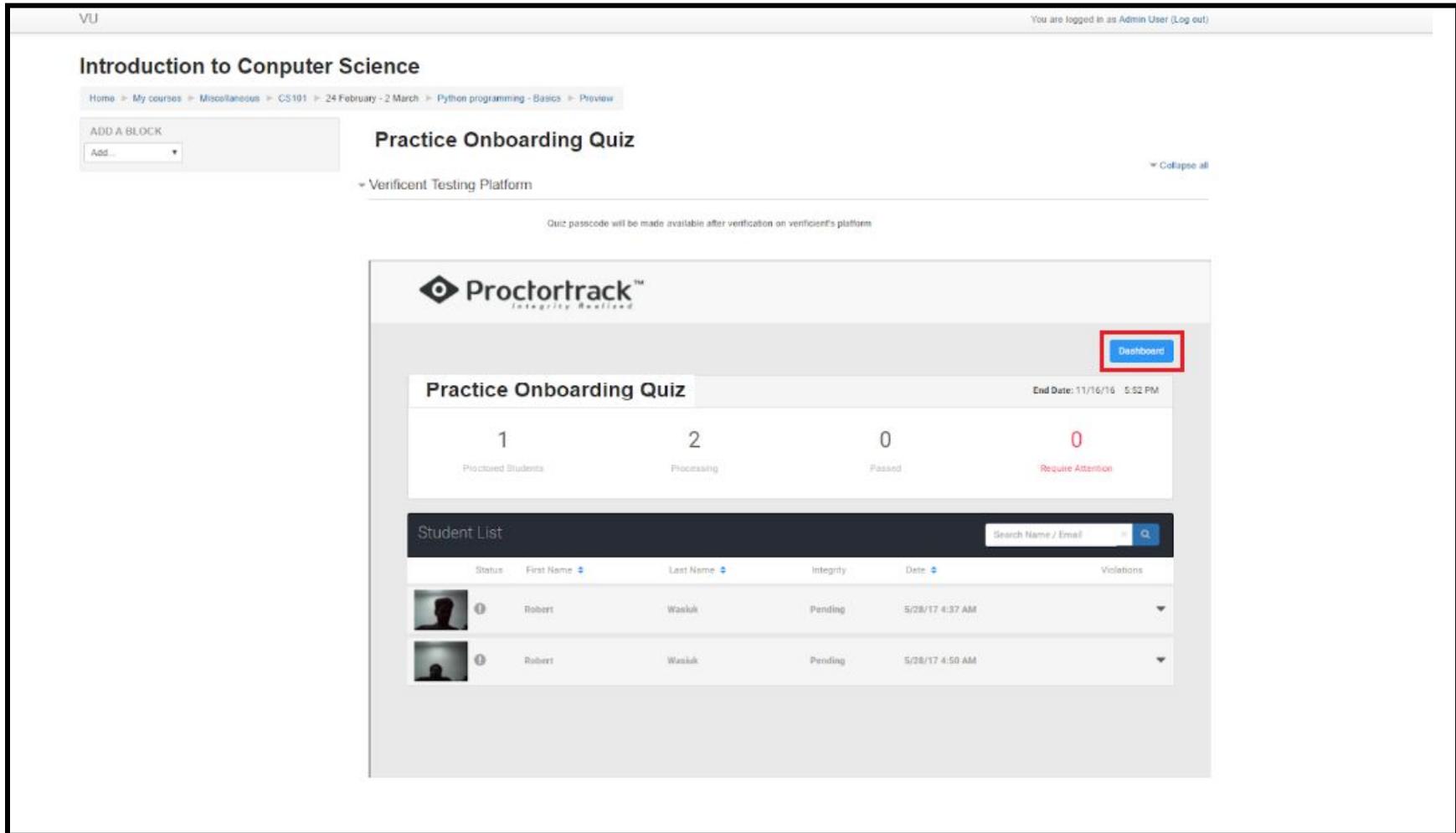
4. Click "Attempt quiz now".



5. Click “Launch Proctortrack Dashboard”.



6. Click on the Dashboard to go to the Test list on Proctortrack Dashboard.



The screenshot shows the Proctortrack dashboard for a quiz titled "Practice Onboarding Quiz". The dashboard includes a navigation breadcrumb, a "Dashboard" button (highlighted with a red box), and a summary of quiz statistics. Below the statistics is a "Student List" table with columns for Status, First Name, Last Name, Integrity, Date, and Violations.

Practice Onboarding Quiz ▼ Collapse all

Verificent Testing Platform

Quiz passcode will be made available after verification on verificent's platform

Proctortrack™
Integrity Revisited

Dashboard

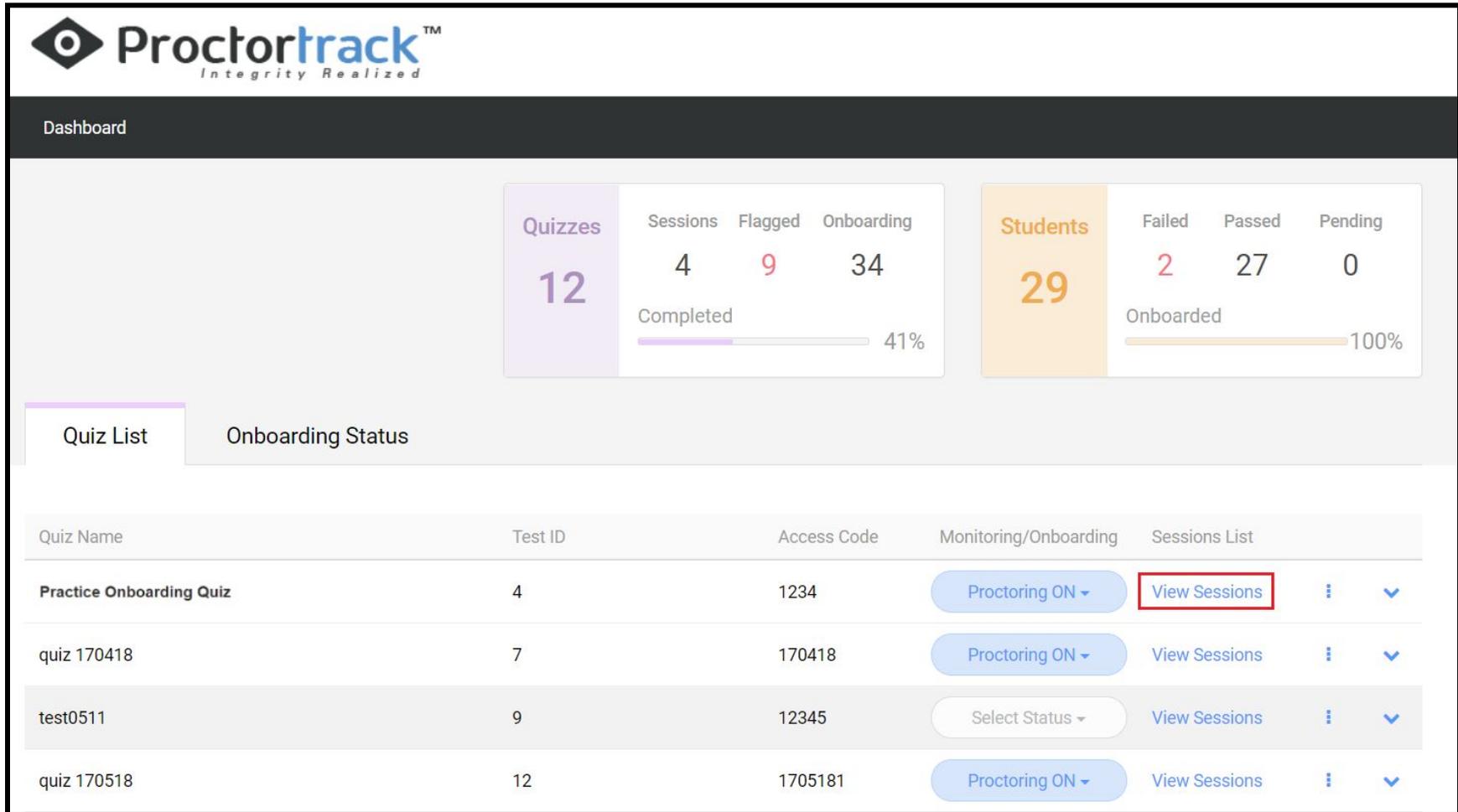
Practice Onboarding Quiz End Date: 11/16/16 5:52 PM

1	2	0	0
Pictured Students	Processing	Passed	Require Attention

Student List Search Name / Email

Status	First Name	Last Name	Integrity	Date	Violations
	Robert	Waskuk	Pending	5/28/17 4:37 AM	▼
	Robert	Waskuk	Pending	5/28/17 4:50 AM	▼

7. Proctortrack will show a list of exams that were enabled for proctoring. Click on **View Sessions** for the exam name for which you would like to review the student's report.



Proctortrack™
Integrity Realized

Dashboard

Quizzes

12

Sessions	4	Flagged	9	Onboarding	34
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Completed 41%

Students

29

Failed	2	Passed	27	Pending	0
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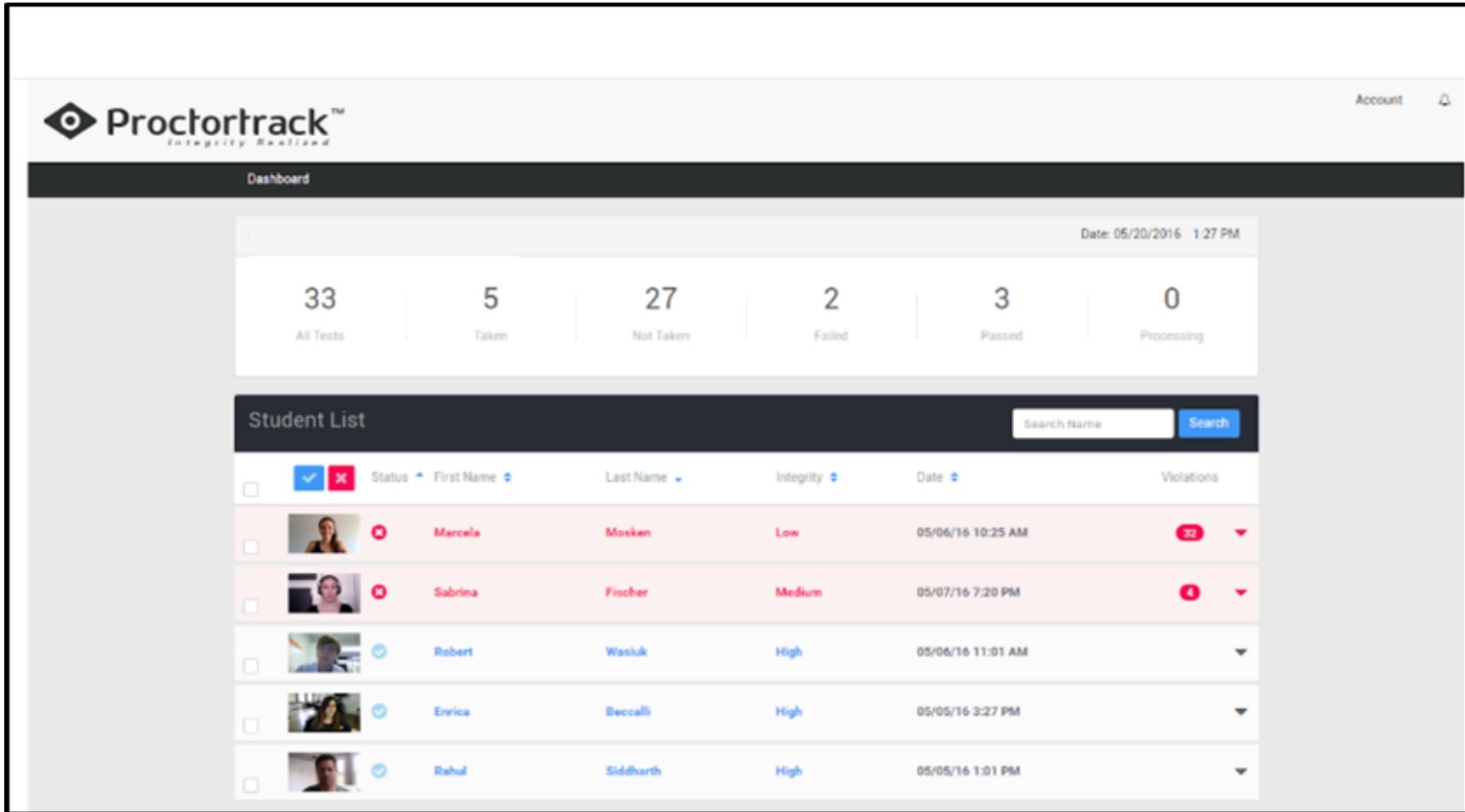
Onboarded 100%

Quiz List

Onboarding Status

Quiz Name	Test ID	Access Code	Monitoring/Onboarding	Sessions List
Practice Onboarding Quiz	4	1234	Proctoring ON ▾	View Sessions ⋮ ▾
quiz 170418	7	170418	Proctoring ON ▾	View Sessions ⋮ ▾
test0511	9	12345	Select Status ▾	View Sessions ⋮ ▾
quiz 170518	12	1705181	Proctoring ON ▾	View Sessions ⋮ ▾

8. Here you can view a summary of the results of students that have completed the quiz. Students marked with **High** integrity are marked in **blue** and students marked with **Low** and **Medium** integrity are marked in **red**. View the student results by clicking on the student name.

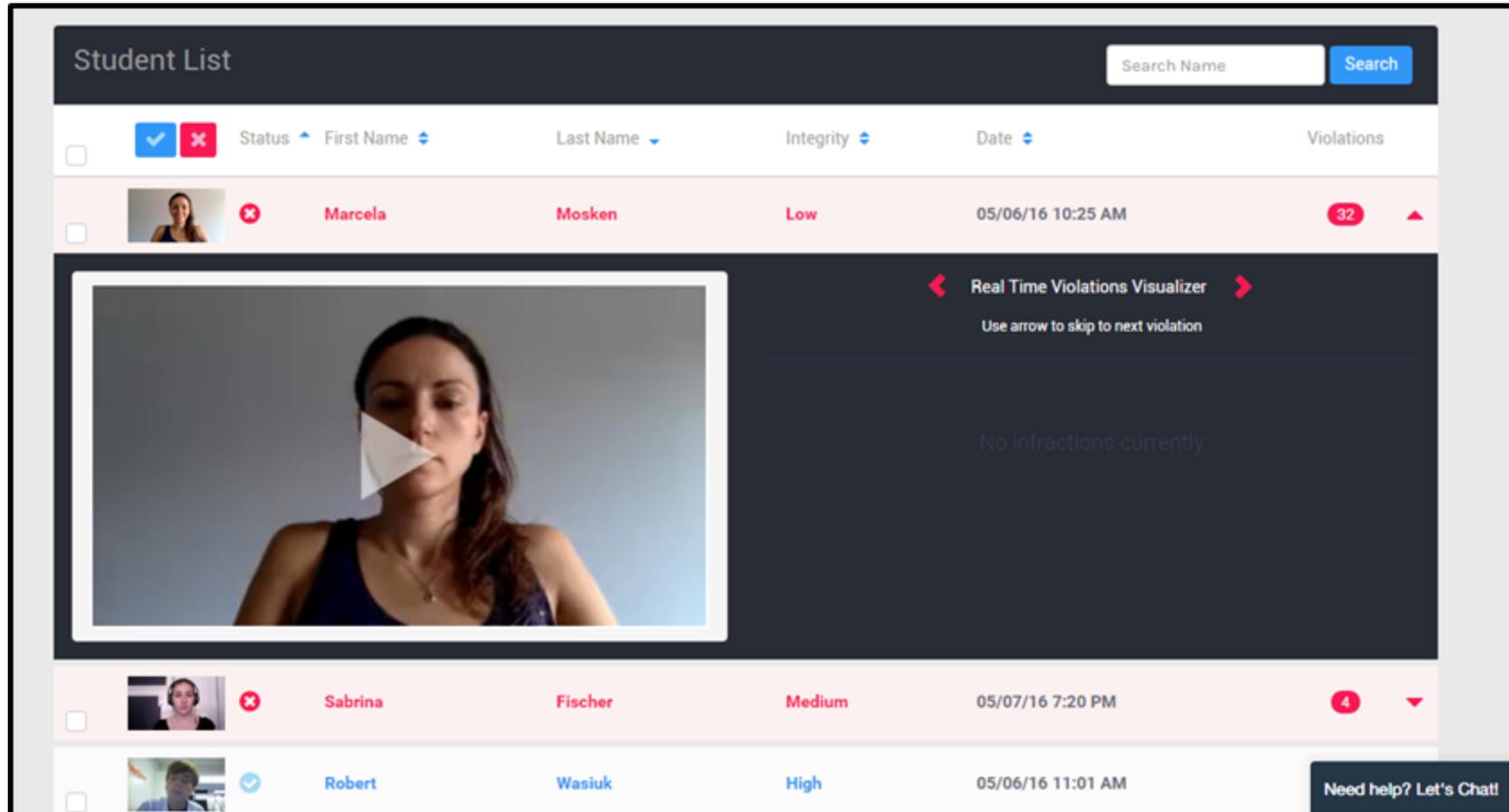


The screenshot shows the Proctortrack dashboard with the following data:

Category	Count
All Tests	33
Taken	5
Not Taken	27
Failed	2
Passed	3
Processing	0

Student List	Status	First Name	Last Name	Integrity	Date	Violations
	✖	Marcela	Moskan	Low	05/06/16 10:25 AM	32
	✖	Sabrina	Fischer	Medium	05/07/16 7:20 PM	4
	✔	Robert	Wasluk	High	05/06/16 11:01 AM	
	✔	Enrica	Beccalli	High	05/05/16 3:27 PM	
	✔	Rahul	Siddharth	High	05/05/16 1:01 PM	

9. You can open the quick view of student violations by clicking the expand button () and using the left and right arrows ( ) to scroll through each violation. To view the full student report, click on the student's name to proceed.

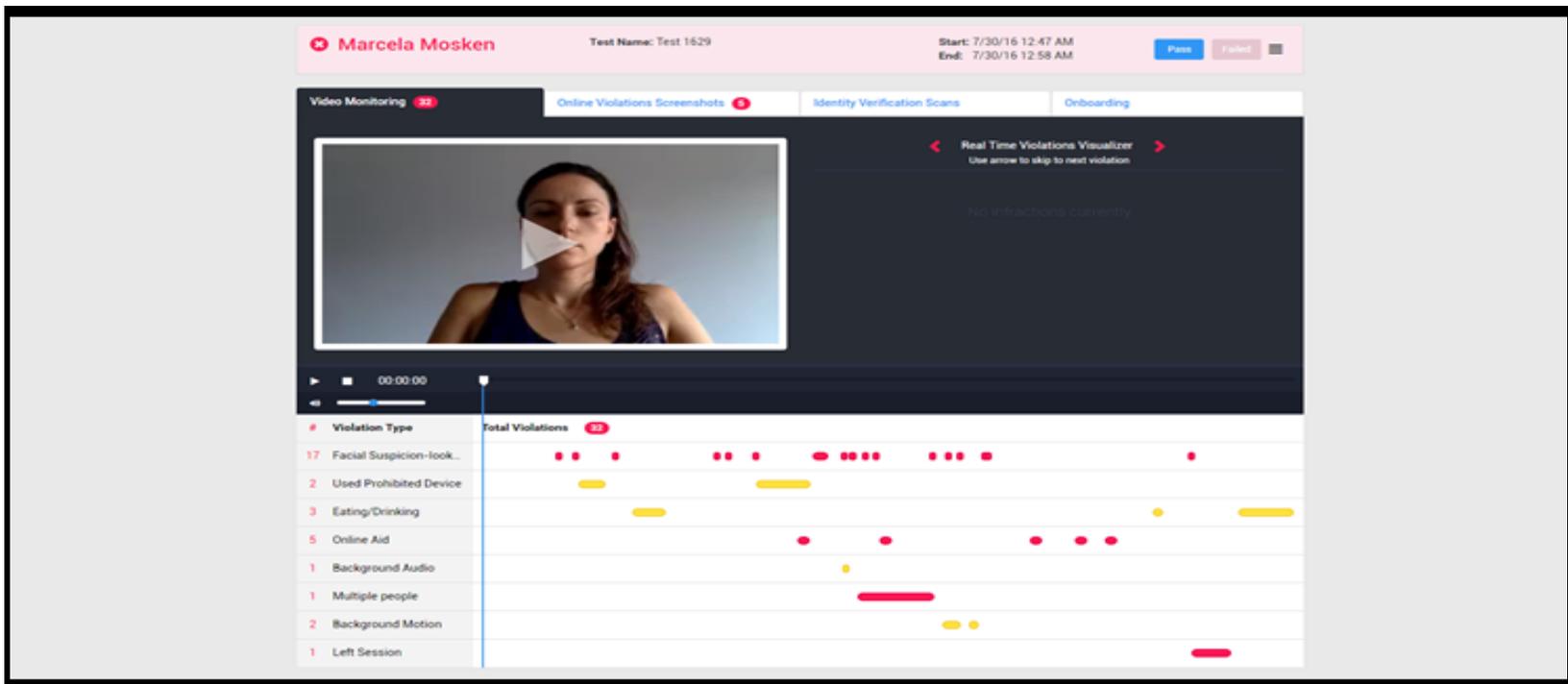


The screenshot displays the 'Student List' interface. At the top, there is a search bar with the text 'Search Name' and a 'Search' button. Below the search bar is a table with columns for 'Status', 'First Name', 'Last Name', 'Integrity', 'Date', and 'Violations'. The table contains three rows of student data:

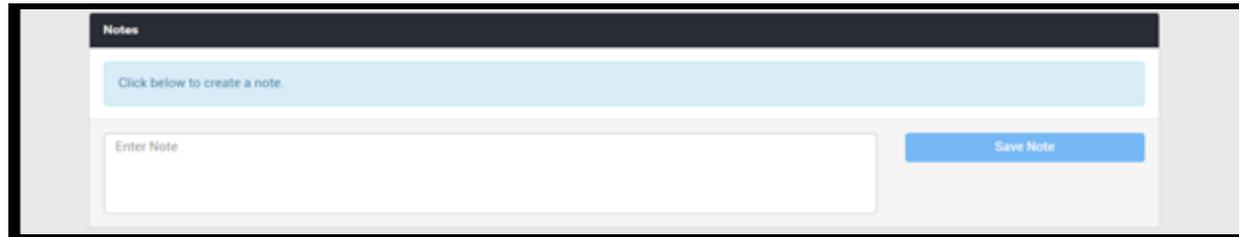
Status	First Name	Last Name	Integrity	Date	Violations
	Marcela	Mosken	Low	05/06/16 10:25 AM	32 
	Sabrina	Fischer	Medium	05/07/16 7:20 PM	4 
	Robert	Wasiuk	High	05/06/16 11:01 AM	

Below the table, a detailed view for the first student, Marcela Mosken, is shown. It features a video feed of the student with a white triangle obscuring her mouth. To the right of the video, there is a 'Real Time Violations Visualizer' section with left and right arrow controls and the text 'Use arrow to skip to next violation'. Below this, it says 'No infractions currently'. At the bottom right of the interface, there is a button that says 'Need help? Let's Chat!'.

10. *Here you can see the Proctortrack Visual Timeline which displays each violation in chronological order.
- There are four tabs to view:
 - **Video Monitoring** (pictured above): Shows video playback time stamped on a playable timeline to skip to moment of the incident.
 - **Online Violation Screenshots**: Screenshots of online aid incidents.
 - **Identity Verification Scans**: Here you may compare face scan with current test with onboarding face scan.
 - **Onboarding**: Here you may view onboarding scans (facial, knuckle, and ID.)



- *You may also create notes in the Notes section at the bottom of the visual timeline.

A screenshot of a "Notes" section in a web interface. It features a dark header with the word "Notes" in white. Below the header is a light blue button that says "Click below to create a note." Underneath that is a white text input field with the placeholder text "Enter Note". To the right of the input field is a blue button labeled "Save Note".

11. Once you've finished the review process, you can override the proctoring results by clicking **"Pass"** or **"Fail"** on the top right and an update will be sent to the student summary page.

A screenshot of a student summary card. The card has a light pink background and is enclosed in a dark border. On the left, it shows a red star icon followed by the name "Marcela Mosken" in red. In the center, it says "Test Name: Test 1629". On the right, it displays the start and end times: "Start: 7/30/16 12:47 AM" and "End: 7/30/16 12:58 AM". At the bottom right, there are two buttons: a blue "Pass" button and a grey "Failed" button, followed by a hamburger menu icon.

The system picks up a variety of incident types. You'll need to consider the incidents on the whole to make a determination of what action to take.

The incident types are as follows:

- **Online aid** - Student has left the LMS and is getting into other applications or other content on the web. If an application is explicitly allowed, then online aid for accessing those applications will not be generated.
- **Left session** - Student has either completely gotten up and left or, more likely the majority of their face is no longer visible to the webcam. This may also happen if student is taking exam in a room that is too dark.
- **Facial suspicion** - Student is looking off the screen with their eyes (perhaps at notes or a book) or has significantly turned their head to the side for a period longer than normal.
- **Multiple people** - Facial recognition has picked up another face.
- **Background motion** - System has picked up significant movement in the background.
- **Background audio** - System attempts to filter out irrelevant audio (keyboard tapping) and highlight abnormal sound from the environment.
- **Keystrokes** - Any blacklisted keystrokes will be highlighted (copy, paste, etc.).
- **Blacklisted apps** - Any banned applications will be listed (Screen sharing software, etc.).

The algorithms will automatically make a determination of whether or not incidents should be applied based on the data available. Professors are then able to decide if the evidence requires further action.

Changing the Password for a Quiz:

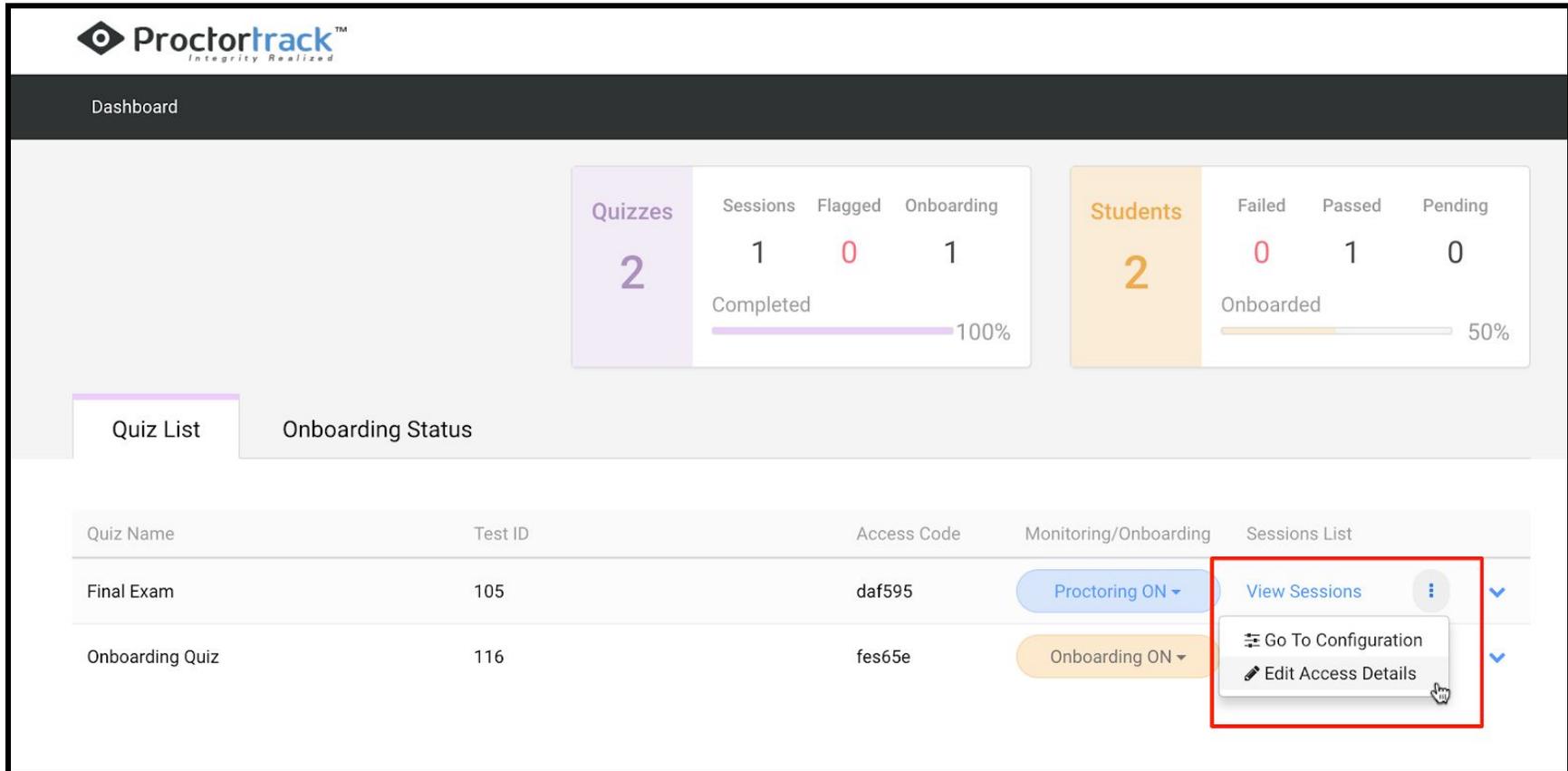
In case the quiz password is required to be changed after the test is created and proctoring is enabled.

1. Go to the **“Edit settings”** for the particular test in the LMS and click on **“Extra restrictions on attempts”**. Change the password in the **“Require Password”** field.



The screenshot displays the 'Edit settings' interface for a quiz. On the left, a dark sidebar contains the text 'Sample Course', 'es', 'formation', and 'Sample'. The main content area shows a list of settings categories: 'Timing', 'Grade', 'Layout', 'Question behaviour', 'Review options', 'Appearance', 'Extra restrictions on attempts', 'Overall feedback', and 'Outcomes'. The 'Extra restrictions on attempts' category is expanded and highlighted with a red rectangular box. Within this section, the 'Require password' field is visible, showing a password input field with a question mark icon, a password strength indicator (dots and a pencil icon), and an eye icon. Below it, the 'Enable Proctortrack for this Quiz' checkbox is checked. A 'Show more...' link is also present at the bottom of the highlighted section.

- Navigate to the Proctortrack Dashboard and click on the 3 dots on the right of the quiz name and select **“Edit Access Details”**.



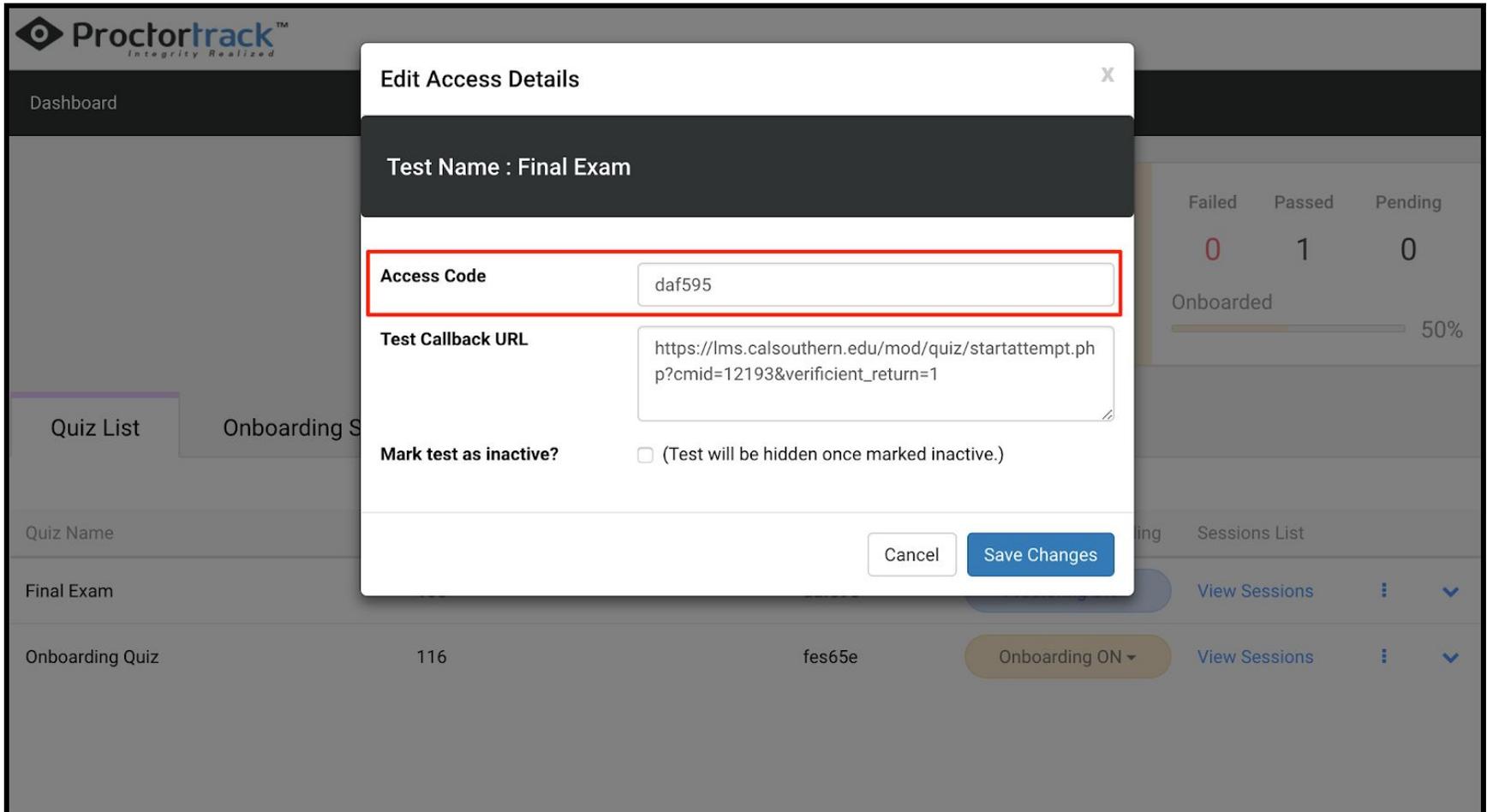
The screenshot shows the Proctortrack dashboard with the following data:

Category	Sessions	Flagged	Onboarding
Quizzes	1	0	1

Category	Failed	Passed	Pending
Students	0	1	0

Quiz Name	Test ID	Access Code	Monitoring/Onboarding	Sessions List
Final Exam	105	daf595	Proctoring ON	View Sessions
Onboarding Quiz	116	fes65e	Onboarding ON	Go To Configuration Edit Access Details

3. Change the Access code in the box shown below and click on “Save Changes”.



The screenshot shows the Proctortrack dashboard with a modal window titled "Edit Access Details" for a test named "Final Exam". The "Access Code" field is highlighted with a red border and contains the value "daf595". The "Test Callback URL" field contains "https://lms.calsouthern.edu/mod/quiz/startattempt.php?cmid=12193&verificient_return=1". There is a checkbox for "Mark test as inactive?" which is currently unchecked. The background shows a table of quizzes and a summary of failed, passed, and pending results.

Quiz Name	Access Code	Status	Actions
Final Exam			
Onboarding Quiz	116	fes65e	Onboarding ON View Sessions

Failed: 0, Passed: 1, Pending: 0
Onboarded: 50%