Moodle is the Lee University Learning Management System (LMS). It is provided for all faculty members to use for teaching. This handout has been developed to help you in completing the following tasks:

• Creating your first Moodle Assessment (In Brief)
  • Create Question Categories
  • Introduction to Assessment Question Types
  • Create an Assessment Activity
  • Add Questions to an Assessment
  • View Assessment Grades.
Introduction to Assessments

There are several different options available within Moodle to customize a quiz or an exam. However, this tutorial will serve the purpose of showing a brief overview of the entire quiz creation process.

Several of the topics listed within this document are explained in much greater detail within the other assessment-related training documents available on our Moodle training website.

Create a Question Category

Before beginning to create questions, it may be helpful to create question categories (although this step is not a requirement). Categories allow for further organization of a large bank of questions. In this regard, the questions may then be grouped together based on the topics that they cover or by the chapters in which the material appears within the course textbook.

How to Create a Category

1. From the main course page, under the Settings block, click on the little triangle next to Question Bank. A fly out menu will appear. Click on Categories.
2. Once the category screen is open give the new category a name and if desired a description as well. Then click on the **Add category** button.

![Add category diagram](image)

3. Proceed to enter in as many additional categories as needed. When this process is completed, look to the left and under **Question bank**, click **Questions**.

![Question bank diagram](image)

**Introduction to Assessment Question Types**

There are several different types of assessment questions on Moodle. This tutorial will offer a brief explanation of each question type.
Locating the Assessment Question Types
In order to begin, locate the course Settings block and click on the link that says Questions.

A question bank that is completely blank will appear as follows:

From the question bank, new questions are created from the Create new question button.
**Question Types Definition List**

The basic definitions of each possible question type are as follows:

**Calculated:** Calculated questions are useful for mathematical questions that involve wildcards.

**Calculated multichoice:** Calculated questions where the correct answer is among a list of potential answers for mathematical questions that involve wildcards.

**Calculated simple:** Calculated questions are useful for mathematical questions that involve wildcards where responses are given by a single word or number.

**Embedded Answers (Cloze):** Allow for different levels of customization within a single question. For example, one question might require a short answer response as well as a multiple choice response.

**Essay:** When the essay option is chosen, instructors may provide a question or piece of information to be discussed and require the students to provide a detailed response. Unlike several of the other available question types on Moodle, essays are only able to be graded manually.

**Matching:** With the matching option, students are given a list of terms or items that each have a drop-down menu alongside them consisting of items to choose from to determine a correct match.

**Multiple choice:** Students are given a question and from that question are to determine what the correct answer is among a list of potential answers. In Moodle’s multiple choice function, there can either be one correct answer or multiple correct answers determined by how the question is set up.

**Numerical:** Students are given a question and they are to type in a numeric response to the question. The difference between a numerical question and a short answer question is that the numerical setting on Moodle allows questions to fit a certain range. For example, if there are several correct answers as long as they are within a certain range.

**Random Short-Answer Matching:** In this question type, Moodle takes a number of short answer questions and places them together to create matching questions. In order for this feature to work effectively, many short-answer questions must be available for Moodle to pull from beyond ones that are already being used for specific parts of the test or quiz.

**Short Answer:** Students are provided with a question and in response they provide either a single word or phrase. The short answer question type is customizable to be case sensitive if necessary.

**True/False:** Students are presented with a statement and are left to determine whether the statement is true or false by selecting one of the two options.
**Description:** The description option allows a page to be displayed that provides information to the student without requiring the student to provide any information back. This type of question may be useful to introduce a specific set of questions that require special directions.
Create an Assessment

If at least one question that has been created, an assessment can be created. Begin by navigating to the course home page and selecting the **Turn editing on** button. With the editing on feature activated, click on the **Add Resource** drop-down menu and select **Quiz**. Please note: **Quiz** is the wording that Moodle uses to create both quizzes and exams.

Continue by filling in the required fields indicated with a red asterisk next to them as well as customizing as many of the non-required fields as needed. When the fields are finished being filled in, click on the **Save and return to course** button.
Explanation of Quiz/Test Options

**Timing:** In the timing section it is possible to click the Enable button to customize when the quiz or exam will be open for students or when the exam closes.

**Time Limit:** Limits the amount of time that students can have the assessment open. Once they open the assessment they will see a running timer letting them know exactly how much time they have left to complete the assessment. There is also an option available to set a time delay between the attempts that the student can make to re-do an assessment if multiple attempts are allowed.

**When time expires:** This setting controls what happens if the Student fails to submit their quiz attempt before time expires. If the student is actively working on the quiz at the time, then the countdown timer will always automatically submit the attempt for them, but if they have logged out, then this setting controls what happens.

**Submission grace period:** The time that is allotted for those quizzes that are still open after time expires.

**Grade category:** Select the appropriate category in the course grade book for this item to be placed.

**Attempts allowed:** The total amount of attempts a student can make on this quiz.

**Grading method:** If the students are only allowed to take the assessment one time, the default setting of *Highest grade* is the best setting to leave this option at. This setting will need customization if students are allowed to take multiple attempts at completing the assessment. The options available are *Highest grade*, *Average grade*, *First attempt*, and *Last attempt*. The option selected will indicate which setting Moodle will use in grading the quiz or exam attempts to calculate a final quiz or assessment grade.
**Question order:** It is possible to customize how many questions appear on a page at a time. You may shuffle the questions randomly or have them appear as they do on the edit screen.

**New page:** You may set that the questions appear all on one page or in increments of 1-50 questions per page.

**Navigation method:** The free method allows students to answer questions selectively within the attempt. This can be changed to *Sequential*, meaning that students will have to answer each question before going on to the next.

**Shuffle within questions:** This option shuffles the options for multiple choice answers and matching questions.

**How questions behave:** Students can interact with the questions in the quiz in various different ways. For example, you may wish the students to enter an answer to each question and then submit the entire quiz, before anything is graded or they get any feedback. That would be 'Deferred feedback' mode.

Alternatively, you may wish for students to submit each question as they go along to get immediate feedback, and if they do not get it right immediately, have another try for fewer marks. That would be 'Interactive with multiple tries' mode.

Those are probably the two most commonly used modes of behaviour.

**Each attempt build on the last:** This option saves the information from the previous session so that an assessment may be returned to on multiple occasions without scores being lost. In the *Adaptive mode* setting, if *Yes* is selected then students will be allowed to take multiple attempts.
At questions they originally incorrectly answered. By selecting No for adaptive mode students will only be allowed one attempt per question.

**Review Options:** In review options, the level of feedback and answers that will be displayed to students as they are taking the assessment may be modified. It is even possible to have Moodle let the students know whether they answered a question right while they are taking the quiz and before moving onto the next question.

**Show the user’s picture:** Displays the user’s profile picture on the screen while that user is taking the assessment.

**Decimal places in grade:** This setting specifies the number of digits shown after the decimal point when displaying grades or grades.

**Decimal places in question grades:** This setting specifies the number of digits shown after the decimal point when displaying the grades for individual questions.

**Show blocks during quiz attempts:** If set to yes then normal blocks will be shown during quiz attempts.
Extra restrictions on attempts: Under the security setting, a pop-up with Java Script security may be utilized for additional features that help restrict a student's ability to 'cheat' on their quiz or exam. For example, copy and paste functions are restricted while this setting is enabled. Also under the security tab a password may be required in order to take the assessment. If there are only a specific group of computers where the test is allowed to be taken then the network address field may be used to specify a specific network address that the assessment may be accessed from.

Overall Feedback: In the overall feedback fields, feedback may be given for certain percentage scores. For example, a specific feedback phrase may be given for scores that are 100% Excellent job! and 90% Great job! and 40% Good try. Please attempt the quiz [or exam] again.

Common Module Settings: Under common module settings, group settings may be used if the assessment will be graded as a group assessment. Also, the grade category drop-down menu may be expanded so that a Quiz or Exam category may be chosen if one has already been created in the gradebook.

Restrict Access: These options allow you to restrict access to the assignment to a certain date range, or to set grade conditions that must be met before a particular student can access the assignment.
Add Questions to an Assessment

From your course page, click on the assessment's name.

How to Add Questions to an Assessment

1. Begin by clicking on the Edit quiz button on the assessment page.

2. Once the page has been loaded, if the question bank contents block is minimized, click on the link [Show].

3. Now we can be sure that the Question bank contents is displaying. The quiz page should indicate that no questions have been added yet. Let’s take a closer look at the list of questions and the columns of information within. From going left to right, the two angle brackets known as the Add to quiz icon. If you want to move just that question over, then this icon should be clicked. Next is a checkbox that you can select many of these questions in one group then select the Add to quiz button towards the bottom. The next icon is icons specific to each type of question and has no action. Remember how you entered in the Question name? The next column shows this data. You may edit the question by clicking on the pencil icon. And finally, you may preview the question by clicking on the magnifying glass icon.
4. Now the assessment questions will appear on the left hand side of the page. In the image below one description and five different questions now appear in the list. In the Grade box, the amount of points each question is worth is displayed. If the value needs to be changed, click on the Save button per change. In the Maximum grade box the total amount of points possible for the quiz appears. If the Maximum grade is a different value than what the questions are worth the grades for the quiz will be scaled to this number. Any of the values of Grade or Maximum grade may be modified from this screen if needed.

5. To change the order in which the questions appear use the up and down arrows as shown in the image below.

6. If you need to make changes to the Maximum grade, click on the Save button to the right of the field.
View Assessment Grades

Because Moodle automatically inputs grades for the assessments that are built online no data entry for the gradebook as far as assessment grades are concerned is required. To begin the process of viewing the grades for an assessment click on the *Turn editing on* button that is located on the main course page.

**How to View Grades for a Quiz / Exam**

1. On the main course page locate the link to the assessment and select it.

2. Then click on the *Attempts* link to view the completed quizzes or exams.

3. The next screen will show the quiz attempts and how the students did on each question and how long the assessment attempt took for each of them.

4. By clicking on the *Statistics* under the *Navigation* block a breakdown of the students’ performance for each assessment question is evaluated.

5. To return back to the main course home page, click on the main course link in the upper left hand corner.
Supporting Information

Congratulations! You have successfully completed the Assessments Training Guide. If you have any further questions please feel free to stop by, call, email, or visit the Training Site full of videos and training documents (http://webpages.leeu.edu/cte/). Stop by the Center for Teaching Excellence in the Mayfield Annex room 101. Call us by calling (423) 614-8315. Or by email Brett Deaton at bdeaton@leeuniversity.edu or Michael Sturgeon at msturgeon@leeuniversity.edu.