Creating a new Moodle quiz is accomplished in two steps. The first step involves creating the quiz activity itself. During this step, you configure the quiz with the options you want for the students who will interact with that quiz. This involves items such as how long the quiz is available and how many questions will be displayed per page. The second step is actually adding the questions to the quiz itself. *This article will* ***only*** *discuss setting up the quiz configuration*.

1. Turn Editing On
2. Determine the section of the course where you want to add the quiz link. Then, from the “Add an activity” drop-down menu, select *Quiz.*
3. On the Adding a New Quiz configuration screen, the following options are available:

**General section**

**Name:** This section is where you name or title the quiz. The name will become a text link on the course homepage and also on the quiz index screen. This is a required field.

**Introduction:** This section is for any instructions or information regarding the quiz you want to give to the students. The instructions appear on the quiz introduction screen. They will be able to read any instructions before they select the “Attempt quiz now” button in order to begin the quiz.

**Timing section**

**Open the quiz:** Here you can specify times when the quiz is accessible to students. The quiz is not available to students before the stated time. However, they will be able to see the quiz introduction/instructions.

**Close the quiz:** This setting determines when the quiz will close. Students will still be able to see their results after the quiz closes. Just how much of their results they can see is based on what options are selected by the instructor. These options are outlined in the [Review Options Section](https://www.iup.edu/itsupportcenter/howto.aspx?id=87829#ReviewOptions).

**Time limit:** By default, quizzes are not set up to have a time limit. When a time limit is specified, several things are done to ensure that quizzes are completed within the time set:

* JavaScript support in the browser becomes mandatory. This allows the timer to work correctly.
* A floating timer window is shown with a countdown.
* When the timer has run out, the quiz is submitted automatically with whatever answers have been filled in so far.
* If a student goes over the allotted time, any questions answered after that time will be graded as a zero.

**Time delay between first and second attempt:** If set, students have to wait for the specified period of time before they can attempt the quiz a second time.

**Time delay between later attempts:** If set, students have to wait for the specified period of time before they can attempt the quiz a third or fourth time.

**Display section**

This section details how the quiz will be displayed.

**Questions per page:** You can display an unlimited number of questions per page or as little as one question by selecting your choice from the drop-down menu. It is a good practice for longer quizzes to stretch the quiz over several pages by limiting the number of questions per page. Page numbers appear at the bottom of the page for students to use to move back and forth among questions.

**Shuffle questions:** This option will randomly shuffle questions each time a student starts a new attempt for the quiz. This is not the same as the use of Random Question when you add questions to a quiz. Using this option aids in academic integrity by making it harder for students to copy answers from each other.

**Shuffle answers:** Using this option randomly switches the order of the answers within each question each time a student attempts the quiz. This only applies to the Multiple Choice or Matching Question types of questions. Using this option also aids in academic integrity by making harder for students to copy from one another.

***Note:*** Any matching and multiple choice questions in your quiz also have their own “shuffle” setting. The options for these questions will shuffle only if the shuffle options for the quiz and the question are both turned on.

**Attempts sections**

**Attempts allowed:** This option enables you to select the number of times the student can take the quiz. Attempts range from one to ten or unlimited and are selected from the drop-down menu.

**Each attempt builds on the last:** When this option is set to Yes, each new attempt contains the results of the previous attempt. This allows the student on the new attempt to concentrate on just those questions that were answered incorrectly on the previous attempt. *If this option is chosen, then each attempt by a particular student uses the same questions in the same order, independent of randomization settings.* To make sure a student gets a fresh quiz on every attempt, select the No option.

**Adaptive mode:** When this option is used, students are allowed multiple attempts at a question before moving on to the next. This type of question can adapt itself to the student’s answer. One example of this is that a question can actually be set up to give hints based on the previous answer before the student tries answering the question again.

The multiple attempts students are permitted are within the same quiz attempt. For example, even if a student selects the incorrect answer, they can immediately try to answer the question again. If the Apply Penalties option in the Grades section is set to Yes, then the penalty amount set on the question will be applied for each incorrect answer and will be subtracted from the student’s score. *The Apply penalty option is only available in Adaptive mode.*

In adaptive mode, an additional Submit button is shown at the bottom of each question. If the student presses this button, then the response to that particular question is submitted to be scored, and a green check mark is displayed if the answer is correct or a red X if the answer is incorrect. Using feedback, students can be encouraged to try again or move on. Feedback must be selected in the quiz configuration for students to see it.

**Grades section**

**Grading method:** When multiple attempts are allowed, there are several options on how to calculate the final score. They are:

* *Highest grade* — the final grade is the highest (best) grade in any attempt
* *Average grade* — the final grade is the average (simple mean) grade of all attempts
* *First grade* — the final grade is the grade earned on the first attempt (other attempts are ignored)
* *Last grade* — the final grade is the grade earned on the most recent attempt only

**Apply penalties:** Running a quiz in adaptive mode permits the student to try again after an incorrect response. You can choose to impose a penalty for each wrong answer. The amount for the penalty is set at the specific question.

* *Note: This setting has no effect unless the quiz is run in adaptive mode.*

**Decimal points:** This option determines how many digits will be shown after the decimal point when the grade is displayed. This setting is only used for the display of grades, not for the display or marking of answers.

**Review options section**

This section controls what information students will be shown when they review their attempts at the quiz. This will take place *during the attempt in adaptive mode*. It is a matrix with check boxes. The individual items of information that can be displayed are:

**Responses:** What the student entered in response to each question

**Answers:** The correct answer to each question is shown. Please note that the matching question type shows students which answers are correct but does not tell the right answer to ones that are wrong. In addition, short answer and multiple choice question types do tell the student what the correct answer is.

**Feedback:** This feedback is specific to the student’s response to each question.

**General feedback:** The general feedback for the question, which does not depend on the student’s response

**Scores:** The numerical score the student received on each question

**Overall feedback:** Feedback for the whole attempt, which is set up further down the settings form in the Overall Feedback section.

*The time frame when students can see the above items is controlled by what item is checked in each column. The time frames are:*

**Immediately after the attempt:** Items selected in this column are displayed within minutes of the quiz being submitted for grading.

**Later, while the quiz is still open:** Items selected in this column are displayed while the quiz is available.

**After the quiz is closed:** Items selected here are displayed after the quiz closing date. Conversely, if no items are selected in this column, then students will not be able to see their results at all after the quiz closing date.

**Security section**

**Full screen pop-up with some JavaScript security:**

The following security features are put in place when selecting this option;

* The quiz will only start if JavaScript is enabled in the student's web-browser.
* The quiz shows in a separate fullscreen window that pops up and covers all other windows and does not have any navigation controls.
* As much as possible, the student cannot use functions like copy, paste, and print.

**Note:** There are no restrictions in place when the student takes the quiz.

***Note***: Do *not* rely solely on these protections. Please see the article titled [Best Practices for Online Academic Integrity](https://www.iup.edu/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=197306&libID=197323) for other helpful ideas on how to encourage academic integrity.

**Require password:** An optional field that, if used, requires the student to enter a password before they are permitted to take the quiz. The instructor creates the password and gives it to the students. This is helpful to restrict quiz access to an individual or specific group of students.

**Require network address:** This field is optional and may require assistance from a technology manager to implement.  For assistance, please log a ticket in [ihelp](https://ihelp.iup.edu).

You can restrict access for a quiz to particular subnets on a network by specifying a comma-separated list of partial or full IP address numbers.

This is especially useful for a proctored quiz, where you want to be sure that only people in a certain room are able to access the quiz. For example: 192.168., 231.54.211.0/20, 231.3.56.211

There are three types of numbers you can use (you cannot use text-based domain names like example.com):

* Full IP addresses, such as 192.168.10.1, which will match a single computer (or proxy).
* Partial addresses, such as 192.168, which will match anything starting with those numbers.
* CIDR notation, such as 231.54.211.0/20, which allows you to specify more detailed subnets.

Spaces are ignored.

**Common Module settings**

* **Grade mode:** If you have set the course to use groups, this is the area used to associate the quiz with a group. You can use groups with a quiz at one of three levels: no groups, separate groups, or visible groups.
	+ *No group* — There are no groups. Everyone is part of the whole course.
	+ *Separate groups* — Students attempt the quiz within their own group, and other groups are invisible.
	+ *Visible group* — Each group works in their own group, but can also see other groups.
* **Groupings:** A grouping is a collection of groups within a course. Groupings are used to associate the quiz with a specific group or set of groups. Group mode must be set to separate or visible groups.
	+ *Available for group members only* — The “Available for group members only” checkbox needs to be checked when the quiz will only be available to users assigned to groups within the selected grouping, or to any group if no grouping is selected.
* **Visible:** Using this feature, you can choose to Show or Hide the quiz.
* **ID number:** You can give an assignment and an ID number as a means of identifying the quiz for grade calculation purposes. Leave the ID number blank if the activity is not included in any grade calculation.
* **Grade category:** If you have existing categories in your gradebook, you can select the category you want the quiz in and it will be placed in that category automatically when the quiz is created.

**Overall feedback**

Overall feedback is shown to a student after they have completed an attempt at the quiz. This option must be selected in the Review options section in order for the students to see it. The text that is shown can depend on the grade the student got.

* For example, if you entered:
	+ Grade boundary: 100%
	+ Feedback: “Well done”
	+ Grade boundary: 40%
	+ Feedback: “Please study this week’s work again”
	+ Grade boundary: 0%

Then students who score between 100 percent and 40 percent will see the “Well done” message, and those who score between 39.99 percent and 0 percent will see “Please study this week’s work again.” That is, the grade boundaries define ranges of grades, and each feedback string is displayed to scores within the appropriate range.

Grade boundaries can be specified either as a percentage, for example “31.41%”, or as a number, for example “7.” If your quiz is made up of of ten marks, a grade boundary of 7 means 7/10 or better.

Note that the maximum and minimum grade boundaries (100 percent and 0 percent) are set automatically.

You can set as many or as few grade boundaries as you wish. The form allows you up to five ranges at first, but you can add more by clicking the “Add 3 fields to form” button underneath.

If you’re getting confusing error messages about a boundary being out of sequence (when it’s obviously in sequence), or “boundaries must be between 0% and 100%” (and they are), then check that the Maximum Grade for this quiz is set to something greater than zero.