

## What is Peer Instruction?

Peer instruction (PI) is an interactive teaching method that aims to “engage students and uncover difficulties with the material” (Crouch & Mazur, 2001). Peer instruction has been used successfully across a wide range of disciplines, including physics, business, and psychology.

In a typical face-to-face classroom, students come to class prepared, having completed any necessary readings or activities. During class time, instructors guide students through a cycle of activities. Each cycle begins with a multiple-choice question to gauge student understanding of key course concepts and their applications. The results of this poll are not immediately released to students.

Each question is followed up on with an opportunity for students to discuss their answer choice and convince their peers that they have the correct answer. The cycle is completed by re-polling the students and revealing the results of both polls. The instructor can then debrief the students on the results and clarify any remaining questions. This cycle can be repeated multiple time throughout a face-to-face class.

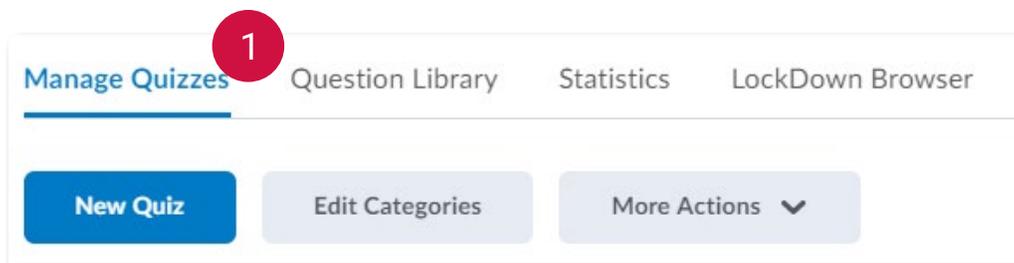
## Asynchronous Peer Instruction in CourseLink

Peer instruction can be recreated in an asynchronous environment by utilizing the following tools:

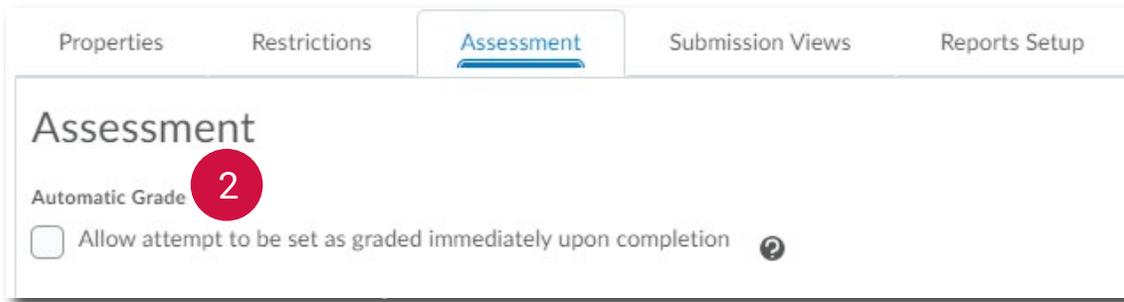
1. Quizzes
2. Discussions
3. Release Conditions
4. Content

## Set up a Peer Instruction Cycle

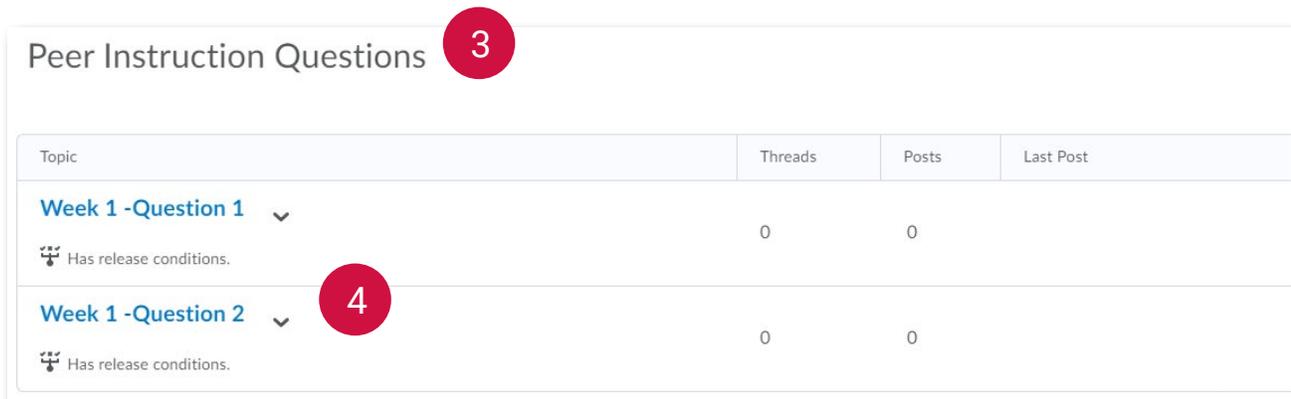
1. Within **Quizzes**, create the pre-quiz. This will consist of 2 to 5 multiple choice style questions. Questions for peer instruction are most effective when approximately 50% of students get the question right on the first attempt.



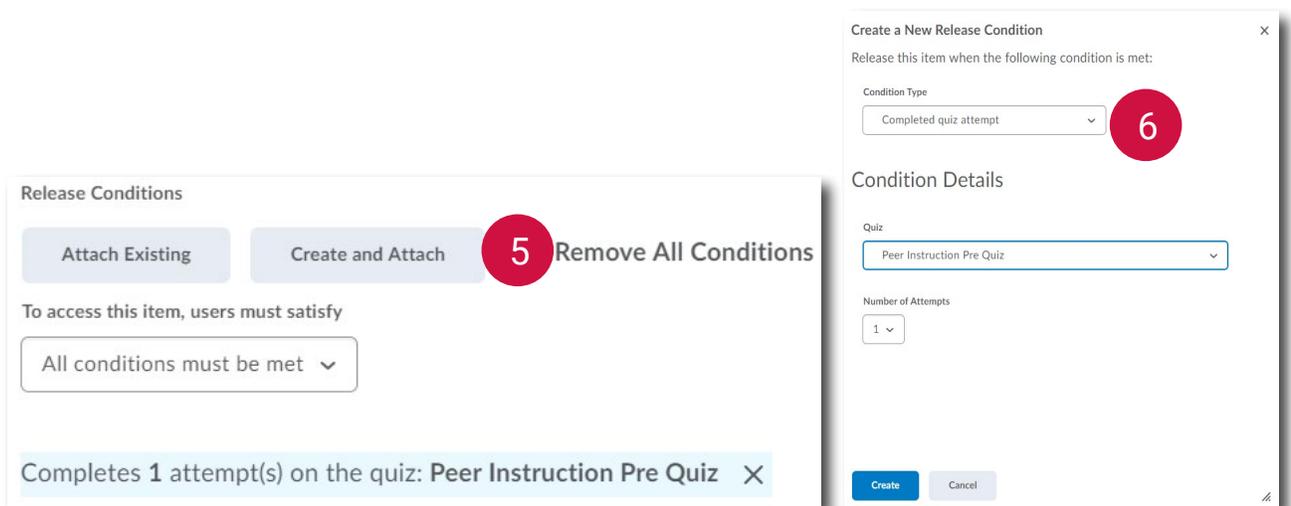
- Navigate to the Assessments tab. Ensure the Automatic Grade feature is turned off. This will prevent students from accessing the answers prior to discussing the results.



- Within the **Discussions** tool, create a forum for the peer instruction discussion boards.

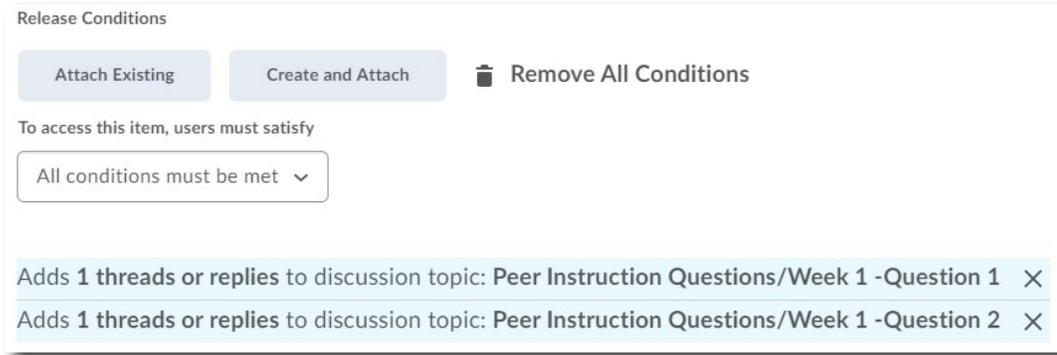


- Within the forum, create a discussion topic for each question.
- Within the **Restrictions** tab, add a release condition by selecting **Create and Attach**.
- Within Condition Type, navigate to the Quizzes options and select “Completed quiz attempt”. Select the appropriate quiz from the populated list. Click **Create**.



- For each additional question, create a separate discussion board topic. For subsequent discussion topics, the **Attach Existing** option for release conditions can be used.
- Create the post quiz. The post quiz will use the same questions as the pre quiz. To provide sequencing, create Release Conditions for each discussion topic.

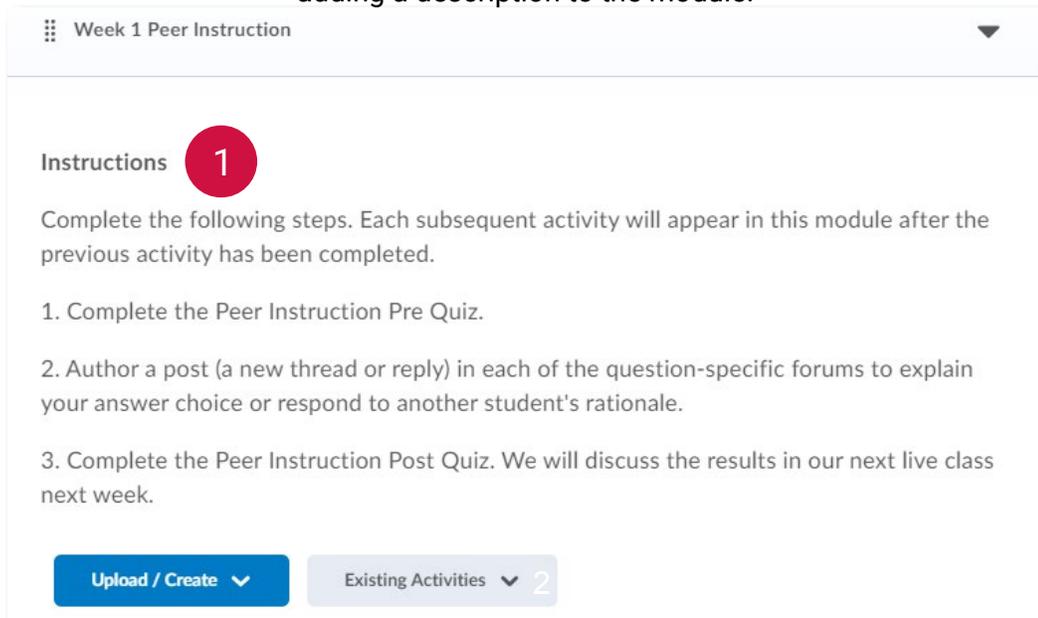
**Note:** For discussions, there is no release condition option that relies on students viewing the topics, they must participate.



**Note:** For any of the quizzes or discussion boards, you may decide to add Due Dates to provide students with a timeline to follow.

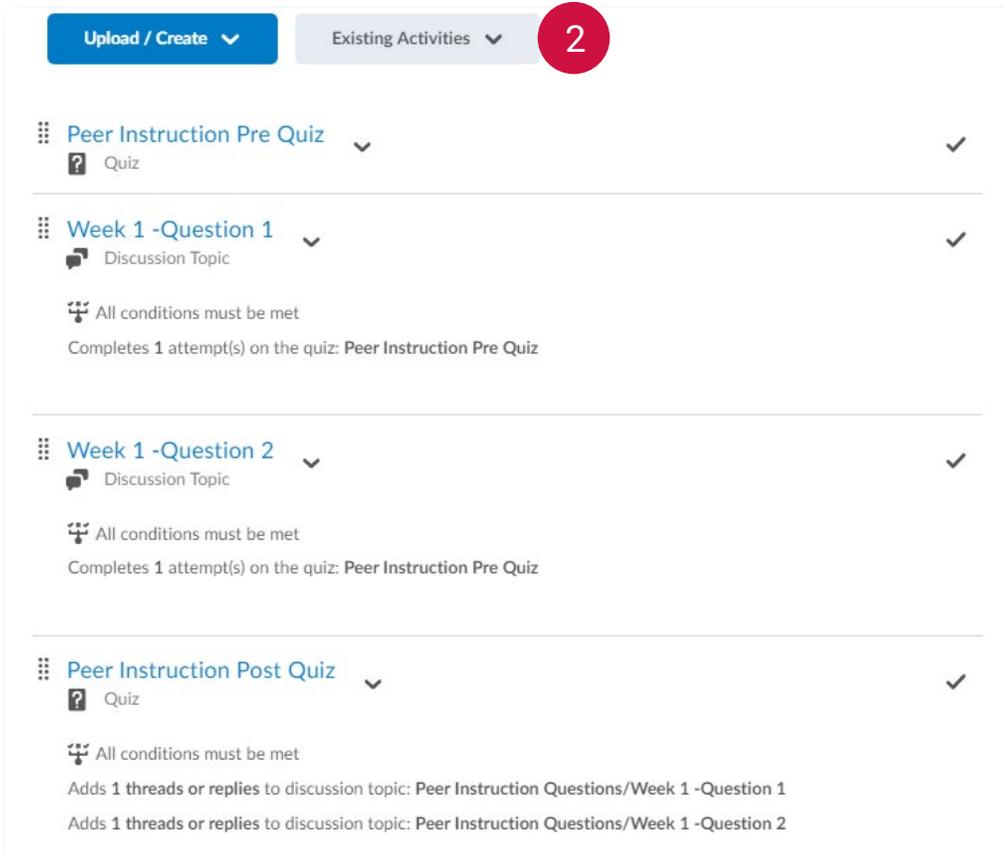
## Share with Students

- To help students move through the sequence of events, provide students with the appropriate Quizzes and Discussion links within the **Content** section of your course. Create a module for Peer Instruction within the appropriate content area (*i.e.*, week). Provide instructions to your students by adding a description to the module.

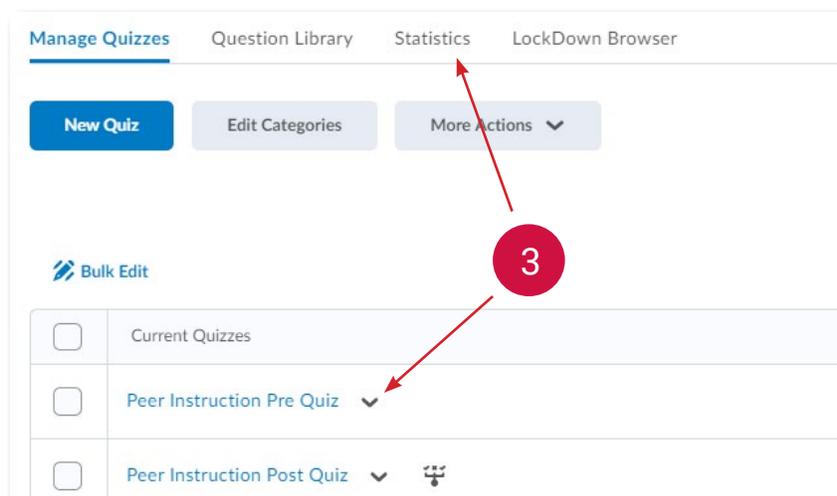


2. Add the Quizzes and Discussions in chronological order. This can be done by using the **Existing Activities** option.

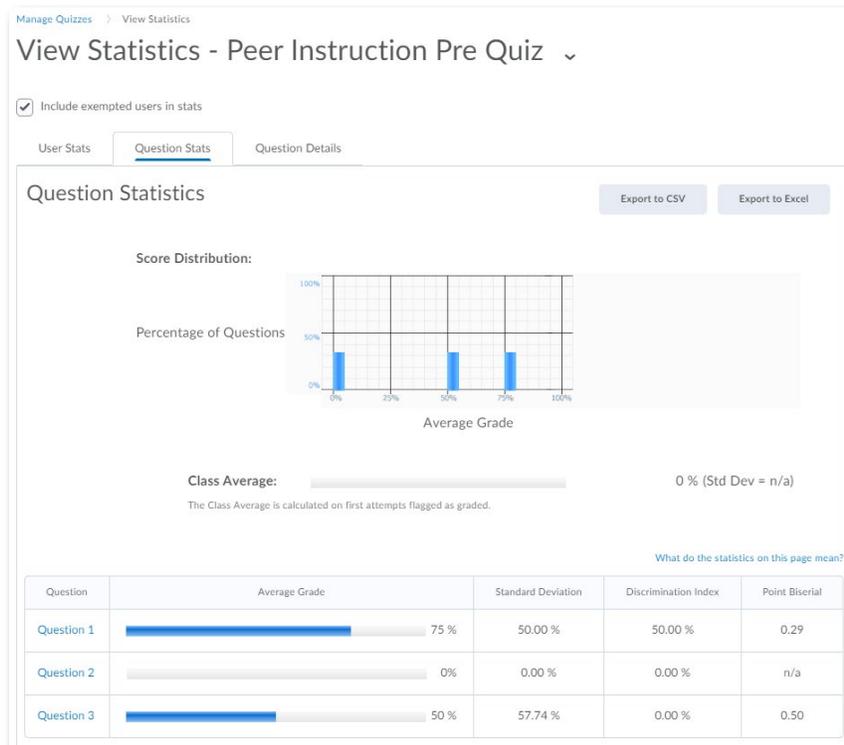
**Note:** Students will only see content within the module as they meet the release conditions.



3. Once the process has been completed, share the results and debrief your students. Statistics for each quiz can be found by selecting Statistics from the context menu beside the quiz name or navigating to the Statistics tab within quizzes.



4. Within the quiz statistics, navigate to the Question Stats tab. Here you can find basic information about how the question was answered. For a more detailed analysis, navigate to the Question Details tab. This information can be exported for both the pre and post quizzes.



5. Share the results and address any remaining misconceptions. This can be done through a synchronous meeting, a content page or through the announcements tool.

## Resources

Crouch CH and Mazur E (2001) Peer Instruction: Ten years of experience and results, *American Journal of Physics* 69(9), 970-977, <https://doi.org/10.1119/1.1374249>

## CourseLink Technical Support

If you have any questions or would like more information about remote delivery, please contact CourseLink Support. We are here to help you.

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Toll Free: 1-866-275-1478 (Canada and USA)

Email: [courselink@uoguelph.ca](mailto:courselink@uoguelph.ca)

## Hours of Operation

Monday - Friday: 8:30 a.m. - 8:30 p.m.

Saturday: 10 a.m. - 4 p.m.

Sunday: noon - 6 p.m.

Holidays: 10 a.m. - 4 p.m.

All times listed above are Eastern Time.