

# Peer Grading Development Cycle

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## I. GOAL(S) OF THE PRE-CONFERENCE WORKSHOP

The overall goal of the “Peer Grading Development Cycle” workshop is to disseminate an innovative development cycle for student peer grading of exams that will work with any curriculum in engineering.

Other goals of the workshop would be to enrich attendees knowledge with the ubiquitous tools needed to create, store and organize videos that will enable a successful peer grading experience for student and instructor in a short time such as a single class meeting.

## II. DESCRIPTION OF TOPICS

The workshop will focus on several aspects of creating a successful peer grading experience for instructors and students. The development cycle includes: the right exam rubric, video creation, creating a blind “coupon” sheet, using students and class time to grade and storage.

A solid rubric is the best candidate for a test to be peer graded. The rubric will be used in creating videos that along with a correct answer, describe each point breakdown in detail. The rubric can be rigid or have partial credit on it.

As the instructor, the class meeting is the only time to have everyone together, answer questions, make grading decisions that affect the whole, show the answers, display exam point breakdown, and finally, grade. In order to get all of this done, a private set of videos are created to quicken the information needed for grading. The workshop will use a trial version Camtasia to create the videos.

When taking the test, the students are given a test with the blind “coupon” cover sheet so later, the student graders are unable to determine which student really took this test - protecting the privacy of the original test taking student.

After the tests have been taken, the next class meeting can be set aside for peer grading. The instructor plays the afore mentioned videos which are broken up into segments in order for the student to either the focus on the grading or on their own answer since the possibility of one of them getting it right.

Finally, attendees will be introduced to storing, organizing and linking the videos using YouTube.

## III. QUALIFICATIONS OF PRESENTER

Shawn Lupoli is a Lecturer of Computer Science and Data Structures Coordinator at the University of Maryland, Baltimore County. After an internal grant from the Computer Science Department to develop a Khan Academy and Hybrid model for several classes, Shawn created his own YouTube Channel with several hundred videos using various video editing software and studio recording setups. The addition of peer grading Data Structure exams became its own project in order to give timely feedback, a view of how other students respond to questions, to view different ways of solving a problem and to understand the grading breakdown - all while during a critical class in the core of the Computer Science program. Shawn has mentored faculty in their own development of peer grading, and presented the overall cycle of development at several events to educators of various disciplines.

## IV. WORKSHOP AGENDA

Topic	Duration	Description
“The Big Picture”	(15 mins.)	This will cover why one should invest the effort peer grading. Who are the stake holders, pitfalls, peer grading literature and what is the return on investment (ROI).
Peer grading practice run	(75 mins.)	After taking a small “test”, participants will conduct a peer grading session to learn the overall experience of peer grading. Various anecdotal solutions to difficult graders or questions will be discussed.
Establishing a rubric	(30 mins.)	Not every question will be a fit for peer grading, but determining questions that are, will be a time saver for the instructor and give the same student benefits. Even questions that partially fit the model will save time by

		peer grading.
Blind Coupon and Grading	(15 mins.)	The creation and usage of the blind “coupon” system to protect student privacy is discussed.
Peer Grading Answer Structure	(15 mins.)	When creating a video, how and when to show the overall answer, followed by the breakdown of the answer for partial credit. This is critical in order to balance the student’s ability to grade and learn from their own mistakes.
Creating a video in Camtasia	(1 hour)	With the help of a 15 day trail, create and edit original videos for participant use.
YouTube storage and playlist setup	(30 mins.)	How to establish a YouTube Channel to store videos with viewing privileges and establishing a playlist along with the exam question sequence.

#### V. ANTICIPATED AUDIENCE AND SIZE

No more than 25 participants.

Aimed at those interested in improving exam feedback and timeliness while empowering students with grading requirements and material that is essential for further learning within the course. The target audience ranges from the new instructor, to experienced, senior faculty who are interested in advancing the quality of their exams effectively correcting any lingering issues the students might continue to make if the test were graded in the traditional, slow and costly method. This workshop provides an overview of relevant research literature, and provides participants with hands on peer grading experience, video creation, and suggestion of data collection methods.

#### VI. DESCRIPTION OF THE TAKE-AWAY SKILLS

Attendees will recall the overall peer grading development procedure and benefits for both students and instructors, evaluate example peer graded exam and corresponding pre-created YouTube videos, identify exams with rubrics that work best in peer grading situations, and apply rubrics to videos created using Camtasia.

#### VII. SPECIAL REQUIREMENTS

Outlets and wireless internet will be needed for the presenter and attendees. But, attendees should bring their own laptop as on-board microphones and cameras and would allow them to move to optimal recording locations.

Otherwise, separate USB microphones and cameras can be attached.

Participants should also download a trial version of Camtasia in order to practice video recording.

#### VIII. ANTICIPATED fee for attendees

None anticipated.