Create Crowdmark Administered Assessment (without Odyssey)

1. Create a Crowdmark account at https://app.crowdmark.com/sign-in/waterloo
   A Sign in With Learn button will show up, and you can log in with your Learn credentials.
   You must use your 8 character maximum UWaterloo email address. If you have
   a Crowdmark account under a different email address (eg. first.last@uwaterloo.ca), you will
   not be able to access any Crowdmark assessments created through Odyssey here. Please add
   the 8 character maximum version of your email as a secondary email in Crowdmark to have
   your accounts merged. You can do this by clicking on your profile icon in Crowdmark.

2. Inform W Print (Karen Ertel kaertel@uwaterloo.ca and Lisa Holden lkholden@uwaterloo.ca)
   that you would like them to handle the printing and scanning of your assessment. Please
   include the following details:

   - date and time of test
   - where you would like printing delivered
   - when you would like to drop off the papers for scanning (W Print is open Monday-Friday
     from 8:30-4:30pm. After business hours, exams can be dropped off in their original exam
     boxes at Police Services)
   - when you would like to begin grading (note that no scanning is done on weekends)
   - if you would like W Print to securely store papers after scanning or return to you
   - an account number to charge the printing and scanning costs to

3. Prepare your assessment using Word, LaTeX etc and save as a pdf. Leave a 1.5 inch gap at
   the top of each page and sufficient space to answer each question. It is recommended that an
   extra page or two be added at the end of the assessment for overflow work.

4. Crowdmark's Administered Assessments supports the grading of multiple questions per page.

5. Beside the My Courses heading, there is a dropdown menu with Crowdmark and LEARN @
   University of Waterloo.

   - If you are using LEARN for grades, choose the LEARN heading and click on Import a
     Course (blue button at the top right).
   - Otherwise, under the Crowdmark heading, you can +Create a course with the name of
     your course (ie. MATH 135).

6. Click the blue button +Create an Assessment of Type "Administered" within the course.

7. You have the option to enable automated matching of assessments by student ID number by
   clicking the checkbox. Note: if you select this option, you must leave an additional 3.5 inches
   (for a total of 5 inches) on the cover page. A box for student information will automatically
   generated, which is used for automated matching.

8. By checking the box for Include multiple choice, you are able to include up to 200 multiple
   choice questions which are automatically graded by Crowdmark. Each multiple choice page
   can include up to 40 questions, and the number of pages (up to 5) must be specified.

9. Browse your computer for the pdf of your assessment and upload it to Crowdmark. Select double-sided printing so that questions appear on both sides of the page.

10. A preview template will pop up. If all looks well, click Next. Otherwise, you may have to make changes to your file and upload again, in which case click Try again.

11. Define Questions. The default setting is 1 question per page. If you have sub-questions on the same page, you can add a question, include the marks allocated for each sub question and drag the score box beside each sub question. You can also edit the names of the questions here (for example Q1a, Q1b). The grader will then be able to record grades in each score box and Crowdmark will automatically calculate the total score. You can also adjust these question labels and max points later by clicking on the "Questions" tab from the Dashboard of your assessments.

12. Enroll Students

    - If you have imported your course from LEARN, you can simply Click to import students from LEARN and an up to date list of your student emails will be automatically added.
    - If you have created your course in Crowdmark, you will need to paste a list of UWaterloo student emails expected to write the assessment. You can obtain a list of student usernames from Quest, add a blank column in excel and concatenate username with "@uwaterloo.ca".

13. Almost finished! Include a few extra copies for each test room.

14. Generate the large pdf of tests to be printed and download it. This pdf contains a copy of the assessment for each student and every page has a unique QR code.

15. Send large pdf to kaertel@uwaterloo.ca and lholden@uwaterloo.ca using sendit.uwaterloo.ca.

Prepare to Grade a Crowdmark Administered Assessment

1. Once your assessment has been created, it will appear under My Courses in Crowdmark.

    - Be sure to select the LEARN @ University of Waterloo menu beside My Courses if you imported your course from LEARN.
    - Otherwise, select the Crowdmark heading from the drop down menu beside My Courses.

2. Click on your assessment and under "Team" you will be able to Invite graders to your team.

3. Add kaertel@uwaterloo and lisa.holden@uwaterloo.ca as Uploaders for your assessment. Paste email addresses of your marking team of TA's and instructors and assign the correct role for each. Graders can grade assessments only (likely TA's), Facilitators (likely instructors) can administer, invite team members, upload, match and grade assessments, and Uploaders can upload scanned assessments only. (You can also import your team from LEARN).

4. Adding Student Metadata

- If you imported your course from LEARN, additional information such as student id, UW userid, first and last name has already been added.

- Otherwise, you have the option of adding more student user information (Metadata) in addition to the email address for each student. Click on "Students" from the left hand menu and "Upload Metadata". You can add a csv file with each student's email, section number, first and last name. This should match the information a student has written on the front page of their test and may help with matching assessments to students. You may also want the students organized by section number when downloading the grades after marking.

5. Prepare a marking scheme for your team and assign markers to questions. You can easily divide the marking of a single question among several markers. (Marker A marks students booklets 1-12, marker B grades 13-24, marker C grades 25-36 etc.) You will be able to reassign the marking if some questions turn out to be slower to grade.

Grade Crowdmark Administered Assessment with your Team

1. Printed test papers will be delivered by W Print to your department office (math undergrad office for any core math courses). If you have students writing with AccessAbility Services (AAS), be sure to provide their office with more than enough separate assessments. **Photocopies are not permitted due to the unique QR code designated for each student.**

2. After tests have been written, bring them to W Print for scanning (GSC 1167) at the time scheduled with W Print. Direct delivery of AAS assessments to W Print can be arranged by contacting Mike Belfry (mike.belfry@uwaterloo.ca). Otherwise, you will need to arrange for in person pick up with AAS or wait until they are delivered to your department by Central Stores.

3. W Print will begin uploading scanned tests onto Crowdmark so that preliminary marking may begin at the pre-arranged time.

4. The Dashboard for the assessment in Crowdmark shows the marking speed for each question as well as the progress of the overall marking at any time.

5. To begin grading a question, simply click on it from the Dashboard. You will then have the option of navigating to a particular student booklet by booklet number or by student email. Click down/up arrow (or use shortcut keys "j"/"k") to move to the next/previous question. Click the right/left ("l"/"h") arrows to move to the next/previous booklet. You can also scroll down to view an entire student's booklet. Note: The Next Ungraded button will bring graders to the next available booklet for a question that no one else is presently viewing or that has not been previously graded.

6. Comments that are repeated often are saved to allow for quick entry. The comment feature also supports Markdown for chemical equations and LaTex for math. Check marks ("c"+click), X's ("x"+click) and question marks ("q" + click) can be dragged or clicked onto the page.

7. A comment can be associated with a score and will automatically update the question total each time the same comment is entered. Associating a positive score with a comment will add this value to 0 and a negative score will be deducted from the question total. For example, if a student forgets to include $+C$, the constant of integration, you may wish to deduct 1 point. This point will automatically be deducted each time the same comment is entered.

8. If a question has multiple parts, or two questions appear on a page, it can either be graded as a single question (with the grader entering subgrades as a comment) OR you can allow the grader to enter the grade for each question in its own designated score box. Note that the default setting in Crowdmark is one question per page. If you would like each question on a page to have its own score box, go to the Questions tab and click "Add Question" and drag to the appropriate location on the page. To save the score for a question, hit enter on the keyboard or the number pad.

9. Matching assessments to students can be done at any time during the marking process by the facilitator(s). From the Dashboard of the assessments under Administration, click on Match Assessments. The cover page of each assessment is viewed and the user information written by the student must be matched to the user information (including metadata if uploaded) stored in Crowdmark.

10. Statistics on grades per question as well as overall scores can be viewed by the graders at any time under the Results tab.

11. Exporting Grades

    - If your course has been imported from LEARN, go to the Results tab on the left hand menu and click the Export grades to LEARN button to have the grades automatically sent to LEARN. You will find them in the category Crowdmark Assessments. If your course has been imported from LEARN, go to the Results tab on the left hand menu and click the Export grades to LEARN button to have the grades automatically sent to LEARN. You will find them in the category Crowdmark Assessments. If you do not wish for these grades to be viewable by students, first create a grade item in Learn inside the category Crowdmark Assessments with the exact same name as it is titled in Crowdmark (Winter 2018 MATH 138 Midterm, for example). Set the visibility restriction on the category to "Hide this category" and this grade item in LEARN to Hide this grade item. Then export the grades from Crowdmark.

    - Under the Results tab, the grades can be downloaded as a csv file containing the user information (metadata) for each student with their total grade as well as the breakdown of marks per page.

12. Click the Send grades to students button. This will email a link to all students to view their graded assessment.