

DoIT Scanning Services
118 Pray Harrold (1st Floor Northeast Corner)
734-487-1492 - <https://tiny.emich.edu/examscanning>

Faculty Exam Scanning Instructions

The Division of Information Technology (DoIT) provides an optical scanning service to scan and score bubble forms for exams. The Exam Scanning Request form, available from the Scanning Services window (address listed above), is filled out by the faculty member to indicate scoring and reporting criteria. Scantron exam sheets for students are also available free of charge from the Scanning Services window.

Scanning Procedure

To ensure scanning and scoring of exams is accurate and complete, follow the steps listed below when filling out, distributing and turning in the Exam Scanning Request form and exam sheets to be scanned:

1. Pick up the following at the Scanning Services window (address above):
 - **Exam Scanning Request forms** - DO NOT make photocopies of the forms as they are numbered.
 - **Exam sheets** - DO NOT make photocopies of the exam, all the copies you need will be provided.

IMPORTANT: Only the original customized Scantron exam sheets (F18095-1-9) supplied by Scanning Services can be scanned on our machine. Photocopies or exam sheets obtained elsewhere can **NOT** be scanned.

- **Student Instructions sheets** - Make a copy of the instructions for each student and pass them out with the exam sheets. If students fail to adhere to the instructions their exam may be rejected or the machine may be unable to perform a scan. The Student Instruction sheets are available online at <https://tiny.emich.edu/examinstructions> in addition to the Scanning Services window.
2. Complete the Exam Scanning Request form (all fields in red are required).
3. Distribute exam sheets and Student Instructions to students. It's important to remind students of the following to avoid rejection of their exam by the scanner:
 - Use only a #2 pencil when filling out the exam (the scanner will **NOT** pick up ink).
 - Cleanly and completely erase all unwanted marks.
 - Completely fill in all required bubbles including EID, name, answer fields and Test Form (Key) if applicable (the scanner will miss incomplete marks).
 - a. Write your EID number and then mark the corresponding bubbles (see Fig. 1).
 - b. Write your last name followed by first name with a space in between and then mark the corresponding alphabetical bubbles, leaving the space blank (see Fig. 2).
 - c. Mark the **Test Form** field with the letter your professor provides (see Fig. 3). If you have not identified a letter on the Exam Scanning Request form you filled out, it defaults to "A."



Fig. 1



Fig. 2

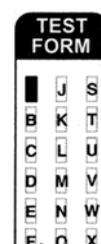


Fig. 3

- Do **NOT** draw on the timing marks at the bottom of the exam sheet
 - Do **NOT** fold or staple the exam, keep exams dry and in good condition.
4. Align all completed exam sheets in the same direction before turning them in. The angled corner for all forms should be in the upper right, failure to do so will delay your results.
 5. Turn in all Exam Scanning Request form(s) and in all exam sheets to Scanning Services.

Reports

Be sure to complete the Reports section of the Exam Scanning Request form and turn it in with the completed Exam sheets. Exam sheets and hardcopy reports will be retained in Scanning Services for 2 weeks from the date submitted, after that time they will be disposed of securely. DoIT can produce the following reports:

- Class Response (A printed copy is automatically provided)
- Standard Item Analysis
- Score Distribution Percentile
- Roster (raw and/or percent, alphabetical and/or EID)

All reports can be printed, but only the Roster reports can be emailed to an EMU email address you provide. Following is a description of the reports:

Class Response

This report tabulates the responses of each student for each question. *By perusing a column you can quickly determine if a question was a problem by the number of wrong answers given and what those answers were.* In each row, a student is listed by EID followed by how each question was answered:

- a dash for each question answered correctly
- the letter of an incorrect answer
- a space if no answer was read by the scan machine
- a hash mark (#) if multiple answers were read by the scan machine

| Response Description | | | | | | | | | | | | |
|---|------------|------|---------------------|------|-------|-------|---------------------|---|---|---|---|---|
| <dash> correct | | | <#> multiple marks | | | | <space> no response | | | | | |
| <alphabet> student's incorrect response | | | <*> bonus test item | | | | | | | | | |
| Test Items: | | | 1-5 | 6-10 | 11-15 | 16-20 | 21-25 | | | | | |
| No. | Student ID | Exam | | | | | | | | | | |
| 1 | 11111111 | 0 | - | - | - | - | - | - | - | - | - | - |
| 2 | 22222222 | 0 | - | - | - | - | - | - | - | - | - | - |
| 3 | 33333333 | 0 | - | - | - | - | - | - | - | - | - | - |
| 4 | 44444444 | 0 | - | - | - | - | - | - | - | - | - | - |
| 5 | 55555555 | 0 | - | - | - | - | - | - | - | - | - | - |

Class Response

Standard Item Analysis

The Standard Item Analysis provides the response frequency for each answer (A, B, C etc.) to each question; marking the correct answer with an asterisk. *This report helps determine if a question is good. It provides insight into how many students marked the correct answer and which answers were not distractors. Also, the Correct Group Responses results makes it easy to see if the upper 27% of students did better than the lower 27%, which you would expect.* The non-distractor column at the end indicates which option(s) was least selected by the students. The mean, median, highest and lowest score are also given.

| Total Possible Points: | 100.00 | Median Score: | 88.00 | Highest Score: | 100.00 | | | | | | | | | | | | |
|--|-------------------------|---------------------------------|-----------|----------------|----------------|---|----|----|----|----|---|---|---|---|---|----------------|-----------|
| Standard Deviation: | 5.85 | Mean Score: | 88.67 | Lowest Score: | 80.00 | | | | | | | | | | | | |
| Student in this group: | 6 | Reliability Coefficient (KR20): | 0.22 | | | | | | | | | | | | | | |
| Student Records Based On: All Students | | | | | | | | | | | | | | | | | |
| No. | Correct Group Responses | | | Point Biserial | Correct Answer | Response Frequencies - * indicates correct answer | | | | | | | | | | Non Distractor | |
| | Total | Upper 27% | Lower 27% | | | A | B | C | D | E | F | G | H | I | J | | |
| 1 | 100.00% | 100.00% | 100.00% | 0.00 | B | 0 | *6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ACDEFGHIJ |
| 2 | 83.33% | 100.00% | 50.00% | 0.05 | C | 0 | 1 | *5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ADEFGHIJ |
| 3 | 100.00% | 100.00% | 100.00% | 0.00 | D | 0 | 0 | 0 | *6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ABCEFGHIJ |
| 4 | 100.00% | 100.00% | 100.00% | 0.00 | E | 0 | 0 | 0 | 0 | *6 | 0 | 0 | 0 | 0 | 0 | 0 | ABCFGHIJ |
| 5 | 83.33% | 100.00% | 50.00% | 0.66 | E | 0 | 0 | 0 | 1 | *5 | 0 | 0 | 0 | 0 | 0 | 0 | ABCFGHIJ |

Standard Item Analysis

Score Distribution Percentile

The Score Distribution Percentile Report lists each raw score and the percentage of possible points it represents. It reports the number of students achieving that score, and what percent of the class they represent. *Use these reports to get a general idea of how the class performed as a whole on the exam. This report shows frequency so you can easily see how many students scored in a range (A, 91-100; B, 81-90; or C's, 71-80).* The report also calculates a cumulative percentage and a percentile. The percentile reported is the percentage of tests scores that are less than the percent correct score listed. The mean, median, highest and lowest scores are also given.

| | | | | | |
|--------------------------------|--------|---------------|-------|----------------|--------|
| No. of students in this group: | 6 | Mean Score: | 88.67 | Highest Score: | 100.00 |
| Total Possible Points: | 100.00 | Median Score: | 88.00 | Lowest Score: | 80.00 |
| Standard Deviation: | 5.85 | | | | |

| Raw Score | Percent Correct | Number of Students | Percent of Class | Cummulative Percent | Percentile |
|-----------|-----------------|--------------------|------------------|---------------------|------------|
| 100.00 | 100.00 | 1 | 16.67 | 16.67 | 91.67 |
| 88.00 | 88.00 | 4 | 66.67 | 83.34 | 50.00 |
| 80.00 | 80.00 | 1 | 16.67 | 100.00 | 8.33 |

Score Distribution Percentile

Roster

The roster report makes grade entry easy by providing the total numeric score for each individual student. The total possible points, and the mean score are also given. You may have the score displayed as raw or percent and select students to be identified with their EID or by name. A letter grade will also display on the raw report that lists students by their EID numbers (see Raw and Percent examples below).

| | | |
|------------------|--------|-------|
| Score Type: | Raw | Quiz1 |
| Possible Points: | 100.00 | |
| Average: | N/A | |

| No. | Student ID | Code | Score | | | | | | | |
|-----|------------|------|--------|--|--|--|--|--|--|--|
| 1 | 11111111 | | 100.00 | | | | | | | |
| 2 | 22222222 | | 88.00 | | | | | | | |
| 3 | 33333333 | | 88.00 | | | | | | | |
| 4 | 44444444 | | 80.00 | | | | | | | |
| 5 | 55555555 | | 88.00 | | | | | | | |

Raw Roster (with student ID)

| | | |
|------------------|---------|-------|
| Score Type: | Percent | Quiz1 |
| Possible Points: | 100.00 | |
| Average: | 88.67 | |

| No. | Student ID | Name | Code | Score | | | | | | |
|-----|------------|--------------------|------|--------|--|--|--|--|--|--|
| 1 | 66666666 | *AYNE, BRUCE | | 88.00 | | | | | | |
| 2 | 11111111 | BUTTON, BENJAMIN | | 100.00 | | | | | | |
| 3 | 22222222 | DANIELS, FREDRICK | | 88.00 | | | | | | |
| 4 | 55555555 | KYLE, SELENA | | 88.00 | | | | | | |
| 5 | 33333333 | LAWRENCE, APRIL | | 88.00 | | | | | | |
| 6 | 44444444 | SMITH, ACONCHSMELI | | 70.00 | | | | | | |

Percent Roster (with alphanumeric student names)

If you have questions specific to scanning or results contact Scanning Services at 734.487.1492.

For general information on interpreting exam reports or student assessment contact the Faculty Development Center at 734-487-2530, or email aavp_fdc@emich.edu.