XJTLU | SCHOOL OF MATHEMATICS AND PHYSICS

School of Mathematics and Physics
Exam Answer Sheet Scanning and System Grading Workflow

Introduction

To ensure the accuracy and efficiency of student assessment, this workflow outlines the scanning and processing procedures for exam answer sheets within the School of Mathematics and Physics (SMP). This document serves as a guideline for the operation and responsibilities involved in scanning and processing machine-readable answer sheets in SMP. Adjustments may be made to optimize efficiency and support faculty needs.

The term "Exam" specifically refers to the exams for MTH modules and PHY modules with machine-readable answer sheets taken by Year-1 students, including in-semester exams, final exams and resit exams.

Types of Exam Answer Sheets

The machine-readable answer sheet primarily consists of two formats: A5 (one-sided MCQ card) and A3 format (two-sided answer sheet). The A5 format follows a standardized template, containing only multiple-choice questions. The A3 format is a customized template that includes not only multiple-choice questions, but also other question types that are marked directly by academic staff on the answer sheet.

A5 format answer sheets: These MCQ cards are primarily handled by Registry. However, Registry no longer handles special cases, such as incorrectly filled in student numbers, and the affected students default to a registered score of 0. After receiving these results, module leaders have to manually check all students' scripts with "0" marks a second time.

A3 format answer sheets: Registry does not provide any support for scanning A3 answer sheets.

Consequently, SMP Professional Service Team (PS) works closely with Registry, SMP academic staff and the scanning system supplier to assist in scanning and processing these A5 and A3 sheets, as well as making simple corrections where necessary, to make marking more efficient, given the demands from large Year-1 modules, and to reduce the workload of module leaders during the marking period.

Scanning and System Grading Process

PS facilitates scanning and system grading for both A5 and A3 answer sheets using available resources within the school.

a) Scanning

Answer sheets are scanned in the order they are submitted by the module leader to PS. A record of the delivery time and completion progress will be listed on the whiteboard in MB437B (Scanning room) to ensure transparency and fairness in the scanning queue.

b) Grading and adjustment

Once the system grading has been completed by the scanning system, PS will handle minor corrections, such as incorrectly filled student ID numbers, seat numbers, and similar errors. For other special cases, the module leader should make a timely decision on the marking of the student scripts. These cases include, for example, situations where the student's answer sheet/specific question is marked too lightly with the pencil and cannot be recognised by the scanning system, or situations involving other academic concerns.

Furthermore, given the time limits and significant workload of the scanning operation, it is recommended that the module leader manually grades the answer sheets that are not machine-readable due to technical issues, when the number of affected sheets is fewer than 10.

c) Confirmation of grades

A list of final grades, accompanied with scanned documents, will be given to the relevant module leader in a timely manner.

Before completing the mark entry on e-Bridge, academic staff are encouraged to conduct a double-check of all scores after the scanning and grading process, to ensure accuracy and reliability.

d) Requests for a second grading

Module leaders who wish to conduct a second review or grading have to wait in a queue, as priority is given to processing answer sheets that have not yet completed the process of initial scanning and grading.

PS will coordinate this queue to ensure fairness and timely completion of the overall grading process. All efforts will be made to expedite the process while maintaining a high standard of accuracy.

APPROVAL AND REVISION LOG

Date	Approval	Description
Feb 18th, 2025	SSMT	Approved