

# randexam: Randomized Exam Generation and Grading

## User Manual

Version 1.10.0

2014-11-19

## 1 Recommended procedures

To prepare a “Final” exam, we assume that we are working within a `exam_final` directory.

### 1.1 Preparing the exams

- Make a directory called `1_exams` and copy in `randexam` and `library.tex`.
- Rename `library.tex` to `final_library.tex` and set the `PREFIX` in `randexam` to `final_`.
- Edit `final_library.tex` to add questions and make the coversheet.
- Run `./randexam proc-lib`.
- Run `pdflatex final_exams.tex`, and look at the output near the end for information about exam lengths.
- Adjust `MINIMUM_EXAM_PAGES` in `randexam` to be the smallest even number that is at least as large as the maximum raw length.

### 1.2 Administering the exams

- Collect both the Scantron sheets and the exam papers (with names on them) from the students, so that exam papers can be later matched to students if needed.

### 1.3 Grading the exams

- Make a subdirectory called `2_scantrons` containing a raw unedited copy of the Scantron data files.
- Make a subdirectory called `3_grading` and copy in the contents of both `1_exams` and `2_scantrons`. All editing should be done in this third directory.
- Run `./randexam proc-scan` and clean up errors in the file as needed.
- Run `./randexam proc-ans`.
- If desired, run `./randexam proc-curve` and adjust the `curve_scores()` function in `randexam` as desired.
- Upload `gradebook.csv` to record the total scores.

- Run `./randexam proc-feedback`.
- If desired, create a `rawscan` directory with PDFs of individual Scantron sheets to be included in email feedback.
- Run `./randexam proc-email`.