

L^AT_EX SEMINAR: TABLES

L^AT_EX has amazing table producing capabilities. Tables are produced with the `tabular` environment. The syntax is

```
\begin{tabular}[pos]{cols},
```

where `pos` has one of the values `t`, `b` or is left empty. These determine the overall alignment of the table relative to the surrounding text, and should be experimented with. The column formatting argument `cols` is a little complex. There must be an entry for every column, consisting of one of `c`, `r`, `l` which indicate the alignment (center, right, or left) of the data in the column, as well as certain optional formatting commands, the most common of which are the symbols `|` and `||` which produce a vertical line and a double vertical line wherever they appear. Rows are then entered using the alignment tabs `&` to separate columns and line breaks `\\` to indicate the end of a row. Unlike columns, the number of rows does not have to be pre-specified. Observe that table data can consist of text or math or both.

Take a look at the code for the following tables in the file `tables.tex` and edit as you wish. There are some commands to keep in mind:

0.1. **multicolumn.** The command `\multicolumn{num}{cols}{input}` joins together `num` columns, aligning the input according to the parameters `cols`, which can be any one of `r`, `l`, `c` together with `|`, `||` as above.

0.2. **hline, cline.** The command `\hline` produces a horizontal line extending across the entire table. It can only be issued after a line break `\\`. The command `\cline{n-m}` draws a horizontal line from the left side of column `n` to the right side of column `m`. It may only be issued after a line break, and several can be issued at once.

0.3. **Table Parameters.** There are several parameters that can be altered. The most useful of these is `\arraystretch`, which may be altered by issuing the command (either locally or globally) `\renewcommand{\arraystretch}{factor}`, where `factor` indicates how much to stretch the spacing in the table. It's standard value is 1.

| TIME | 9-10 | 10-11 | 11-12 | 12-1 | 1-2 | 2-3 | 3-4 |
|------|-----------------|----------|---------------|-------|---------|-----|-----|
| SUN. | sleep | | | | | | |
| MON. | Analysis | Topology | Alg. Geometry | Lunch | Algebra | | |
| TU. | <i>grading!</i> | | | Lunch | CFT. | | |
| WED. | Analysis | Topology | Alg. Geometry | Lunch | Algebra | | |
| THU. | <i>grading!</i> | | | Lunch | CFT. | | |
| FRI. | Analysis | Topology | Alg. Geometry | Lunch | Algebra | | |
| SAT. | party!! | | | | | | |

| Day | 9:10–10:00 am | | 10:10–11:00 am | | 11:10–12:00 pm | |
|------|---------------|----------|----------------|----------|----------------|----------|
| | Subj. | Teacher | Subj. | Teacher | Subj. | Teacher |
| | | Room | | Room | | Room |
| Mon. | Analysis. | Barrett | Topology. | Lott | Geometry. | Hacking |
| | | 3088 EH. | | 4096 EH. | | 2074 EH. |
| Wed. | Analysis. | Barrett | Topology. | Lott | Geometry. | Hacking |
| | | 3088 EH. | | 4096 EH. | | 2074 EH. |
| Fri. | Analysis. | Barrett | Topology. | Lott | Geometry. | Hacking |
| | | 3088 EH. | | 4096 EH. | | 2074 EH. |

I was too lazy to format Tuesday and Thursday, so it's left as an exercise.