

# Formal Models Exercises, SS 2017

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## Excercises

- All exercise groups on Thursdays (weekly during the whole term)
- One assignment (4 exercises) per week, published on course website <http://fmv.jku.at/fm>.
- Exercises follow the lecture closely and are intended as *essential* preparation for the tests and the lecture exam.
- Total number of published exercises will be 40 (tentatively).
- Exercises should be worked out individually, no group work.
- Plagiarism will not be tolerated.
- There is *no* submission of worked out exercises.
- Before class starts, solved exercises should be ticked off on a list.
- Ticking off an exercise indicates that you are prepared to demonstrate your solution at the blackboard upon request.
- For passing the course, at least 28 exercises have to be ticked off.
- Ticking off more than 28 exercises does not influence final grading.
- It is *NOT* possible to make up for missed exercises.

- One of the students who have ticked off a particular exercise will be asked to present her/his solution at the blackboard *without* notes.
- Try to be in class on time: exercises already presented can no longer be ticked off.
- Profound knowledge should be demonstrated in presentations.
- *Quality of presentations influences grading substantially.*

## Tests

- There will be two normal tests and one backup test, with a duration of 45 minutes each.
- One normal test is in the middle of the term, the other one at the end of the term.
- The backup test is approx. one week after the second normal test.
- Whereas the normal tests cover only parts of the content of the lecture, the backup test is about the complete content.
- Participation in the backup test is voluntary. If the backup test is taken, then its result will be used to improve the worst result of the two normal tests, if possible. Otherwise, the result of the backup test is ignored.
- Note that you can only improve but not worsen your final grade by taking the backup test.
- Let  $T_1$ ,  $T_2$ , and  $T_B$  be the number of points achieved in the first, the second, and the backup test (if taken), respectively. Let  $T_{sum}$  denote the overall number of points achieved in tests:

$$T_{sum} := \max(\{T_1, T_2\}) + \max(\{T_1, T_2, T_B\} \setminus \max(\{T_1, T_2\}))$$

- Let  $T_{max1}$  and  $T_{max2}$  be the maximum number of points that can be achieved in the first and second normal test, respectively. To pass the course, the following condition must hold:

$$T_{sum} \geq \frac{(T_{max1} + T_{max2})}{2}$$

## Grading

In order to get a positive grade, the following conditions have to be met:

- More than 28 exercises have to be ticked off (at least 14 exercises have to be from exercise sheets 1-5 and 14 exercises have to be from exercise sheets 6-10).
- The presentations at the blackboard must be graded positively.
- $T_{sum} \geq \frac{(T_{max1}+T_{max2})}{2}$

Assumed that the points above are met, the grade is calculated as follows.

- Let  $b$  the average quality (percentage) of presentations at blackboard and  $T1$  and  $T2$  the results of the first and second normal test. Grading is based on the following value:

$$\frac{T_{sum}}{T_{max1} + T_{max2}} + b$$