

# VL+UE LOGIK: COURSE ORGANIZATION

WS 2019/2018 (342.208, 342.209, 342.W09)



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# Objectives of this Course

In this course, you will learn to

- understand logic formulas
- use concise mathematical notations
- formulate and solve problems in formal languages
- reason with logics manually and algorithmically

This course consists of *lectures* and *exercises*.

# Organization of the Course

## *Lecture*

- each week: Tuesday, 8:30–10:00, HS 1
- link to video stream in Moodle

## *Minitest*

- each week: Tuesday, 10:15–10:30,
  - HS 1
  - JKU Distance Learning Center Vienna

## *Exercises*

- each week: Tuesday, 10:45–11:30, HS 1
- link to video stream in Moodle
- based on the lecture of the same day
- presented by lecturer

# Grading

- weekly minitests during the winter semester (recommended)
  - optionally supplemented by lab exercises
  - if passed positively, no further exam is required
  - details on the next slides
  
- alternative: one big exam
  - over whole content of the course (lecture and exercises)
  - end of semester, spring 2020, autumn 2020
  - extra registration in KUSSS required
  - in Linz or in Vienna

**In either case, you get two certificates (with the same grade): one for the lecture and one for the exercises**

# Structure of this Course

name	lectures	assignments		
		mini-tests	labs	required positive
Module 1: SAT	4	4	1	2
Module 2: First-Order	6	6	2	3
Module 3: SMT	2	2	1	1

# Mini-Tests

- if you hand in one test, you will get the certificates
- each week
- duration: 15 minutes
- everybody has to individually solve a test similar to the exercises discussed in the previous week
- this test will be corrected and is used for the grade of the exercise course
- each handed-in test is worth up to 5 points
- a handed-in test is positive with  $\geq 2.5$  points
  - up to 1 additional point can be earned by solving the weekly challenges
- no test can be repeated or taken at a later time

# Lab Exercises

- the lab exercises have a tool aspect and are voluntary
- each handed-in lab exercise is worth up to 5 points
- solutions of handed-in lab exercises have to be presented orally
- a lab exercise is positive with  $\geq 2.5$  points
- dates for the lab exercises depend on the date of their announcement:
  - Week X: announcement of lab exercise
  - Week X+2 (or 3): submission
  - Week X+3 (or 4): presentation

# Weekly Challenge

- each Tuesday, we publish a weekly challenge
- this challenge can be submitted until the given deadline (before the minitest!) via Moodle
- you can earn up to one extra point that is counted for this minitest (BUT: maximum is still 5 points)
- assume you obtain  $t$  points on the minitest and you get  $c$  for the weekly challenge, then you get  $\min((t + c), 5)$  points
  - example 1: you have 1.5 points on the minitest. With the point from the weekly challenge you have 2.5 points (positive!!!!)
  - example 2: you have 5 points on the minitest. With the point from the weekly challenge you have 5 points.



# Grading

- to pass the course you need to have
  - the required number of positive assignments for each module
  - enough points in total (see below)
  
- grading scheme:
  - $\geq 52$  points: 1 very good (sehr gut)
  - $\geq 44$  points: 2 good (gut)
  - $\geq 36$  points: 3 satisfactory (befriedigend)
  - $\geq 28$  points: 4 sufficient (genügend)
  - $< 28$  points: 5 insufficient (nicht genügend)

# Lecturers

Armin  
Biere



Wolfgang  
Schreiner



**JYU** Martina  
Seidl



Wolfgang  
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# Contacts

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# JKU Distance Learning Center in Vienna

- address: Strozzigasse 2, 1080 Vienna
- lectures and exercises will be live streamed
- weekly minitests can be taken there
- Dr. David Cerna will be available before and after exercises for answering questions



**David Cerna**

Institute for Formal Models and Verification,  
Science Park 3 (SP3), Linz

# Questions?

1. ask your colleagues
2. consult the teaching assistants (time and location is announced in Moodle)
3. ask in the Moodle forum if you have a question of general interest
4. write an email if you have a personal question that is not of interest to your colleagues (otherwise use the forum)

*Resources:*

**<http://fmv.jku.at/logik>**