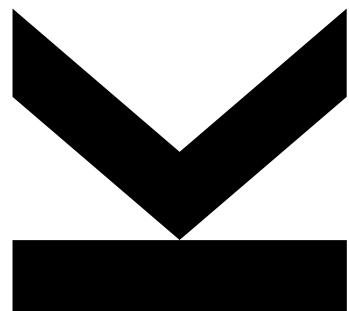


# Statistics for AI



Exercise: General Information  
Version: October, 4<sup>th</sup> 2024

**Mag. Thomas Forstner**  
Department of Applied  
Systems Research and Statistics  
thomas.forstner@jku.at  
www.systat.jku.at

# Course: Presence vs. Distance

- The exercise is offered as a presence course and a distance learning course.
- **Presence Course (course numbers: 366.591, 366.592 & 366.593):**
  - each week, students present homework examples in-class at JKU
  - grade = performance of these presentations + total number of prepared examples
  - no exam, weekly presence in-class at JKU during semester required
- **Distance Learning Course (course numbers: 366.594 & 366.595):**
  - solving of homework examples (= identical to the presence course)
  - grade = number of correctly solved examples + written exam
  - no presence of any kind necessary except for the written exam at the end of the semester

# **Presence Course**

**(Course Number: 366.591, 366.592 & 366.593)**

# Presence Course

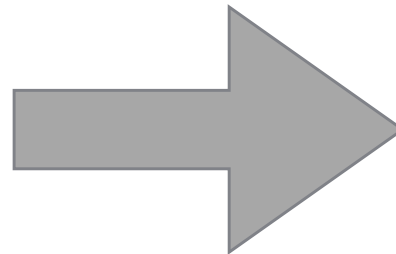
- Each week a homework assignment consisting of examples covering the corresponding lecture has to be prepared at home.
- Before every exercise (deadline Thursday, before 8:00 o'clock) you have to mark on a virtual „checklist“ („Kreuzerlliste“) the homework examples you have solved and prepared at home, and you are willing to present in class. This virtual checklist (also known as „Kreuzerübung“ or „checkmark“) is available in Moodle. Based on the marked homework examples, students are randomly chosen to present examples.
- These randomly chosen students present these examples to the class.
- For a positive final grade at the end of semester, at least 60% of the total homework examples have to be marked as „solved & prepared“ **and** you have to present 5 times and at least 3 presentations out of these 5 presentations of the homework examples have to be positive.
- There is no final exam and no need to hand in the homework assignments.

# Kreuzerlliste / Checklist

- Mark your prepared and solved examples in Moodle until Thursday before 8:00 o'clock (Moodle system time). There are no exceptions, if you forgot to mark the examples on time.



## Exercise 1



You've checked 0 out of 3 examples.  
(0 out of a maximum of 3 points)

Example 1a (1 Point)

Example 1b (1 Point)

Example 2 (1 Point)

Save changes

Revert

Cancel

**If you are late to class, already presented examples will be deleted from your personal checklist (= you are loosing the points of the already presented examples).**

# Presentation of Examples

- At the beginning of each exercise randomly chosen students present the homework examples to the class. You can only be chosen for examples you have marked on the checklist („Kreuzerlliste“).
- The presentation should explain how the example was solved. You don't have to prepare slides for this presentation, just show us how you have solved the example.
- Your „presentation grade“ is not negatively affected, if you made a simple calculation error. The main focus is on understanding the example and being able to explain the idea of how you have solved the example.
- If examples have obviously not been solved by yourself or you are not present through the whole class, even though you have marked examples, all examples of the current assignment are not counted and you get a negative presentation grade.

# Presence Course: Grading System

- **positive grade:**

- **at least 60% of the total homework** examples are marked as „solved & prepared“
- **5 presentations** of homework examples and 60% of these 5 presentations are positive
- each part is weighted with 50% and has to be positive; if you are „between grades“ the presentations and how „excellent“ your individual grades are, decide your final grade

Grading System: % of total homework examples	
excellent (sehr gut)	$\geq 90\%$
good (gut)	[80% to 90%)
satisfactory (befriedigend)	[70% to 80%)
poor (genügend)	[60% to 70%)
failure (nicht genügend)	$< 60\%$

+

Grading System: Presentations	
excellent (sehr gut)	5 positive and excellent prepared presentations out of 5
good (gut)	5 positive presentations out of 5
satisfactory (befriedigend)	4 positive presentations out of 5
poor (genügend)	3 positive presentations out of 5
failure (nicht genügend)	$< 3$ positive presentations out of 5

(Note: If students achieve more than 5 presentations during the semester, this may improve their grade. For a positive grade at least 3 positive out of 5 presentations during the semester and at least 60% of the total homework points are required).

- Obviously, you should be present in a presence course. This means if you are not present you cannot score homework points. **Exception:** one-time joker per student = submission of the homework per mail (thomas.forstner@jku.at) at least one day before the exercise

# Homework Assignments

- The homework assignments are available as pdf-files in Moodle (<https://moodle.jku.at/>) on Wednesday afternoon, one week before the corresponding exercise.
- Supplemental materials for the course are also available in Moodle.
- The course starting at 13:45 is a live-stream, which will be recorded. Students in the distance learning course can join this live-stream, to ask questions, if they want. Reminder: the grading system only depends on the kind of course you have registered yourself. The recording of this live-stream will be available in Moodle for all students until the end of October.
- The homework assignments will become longer and more complex as the semester progresses (the first exercises are relatively short).
- The average homework assignment will be around 20 points (some homework assignments may, however, have more or less points). At the end of the semester, there will probably be between 220 and 280 points (note: each sub-part of an example is a separate point).



# **Distance Learning Course**

**(Course Number: 366.594 & 366.595)**

# Distance Learning Course

- Each week, a homework assignment consisting of examples covering the corresponding lecture has to be prepared at home.
- This homework assignment has to be submitted via Moodle one week later until Thursday, before 8:00 o'clock (**absolutely no exceptions**). Each **correctly** solved homework example counts one point. If at least one example has obviously not been solved by yourself, the total current assignment gets 0 points. This also includes facilitating or contributing to cheating.
- At the end of the semester, at least 60% of the total homework points have to be achieved to be eligible for the final written distance exercise exam.
- The distance exercise exam will take place on Thursday, June 26<sup>th</sup> from 17:15 to 18:45 [changes are possible] (JKU, Bregenz & Vienna) and supplements the five presentations of the presence group (= exam consists of 5 examples).
- The exam is an open book exam (i.e. any **printed paper** documents are allowed) but absolutely no electronical devices of any kind (no mobile phone, no tablet, no computer, ...) except a „real“ calculator are allowed during the exam.

# Distance Learning Course: Grading System

- **positive grade:**

- at least 60% of the total homework points
- at least 50 points on the written exam (total 100 points)
- each part is weighted with 50% and has to be positive; if you are „between grades“ the exam and how „excellent“ your individual grades are, decide your final grade

Grading System: Homework Examples	
excellent (sehr gut)	$\geq 90\%$
good (gut)	[80% to 90%)
satisfactory (befriedigend)	[70% to 80%)
poor (genügend)	[60% to 70%)
failure (nicht genügend)	$< 60\%$

+

Grading System: Exam	
excellent (sehr gut)	$\geq 88$ points
good (gut)	[75 to 88) points
satisfactory (befriedigend)	[62 to 75) points
poor (genügend)	[50 to 62) points
failure (nicht genügend)	$< 50$ points

- **homework points:**

1) The age in years of 5 people is given.

Age [years]: 25, 25, 45, 31, 59

Calculate the following descriptive summary statistics:

- arithmetic mean
- median



This example consists of two parts („a“ and „b“) so it counts 2 points.

The points of the examples are not weighted, each part counts 1 point.

# Homework Assignments & Submission

- The homework assignments are available as pdf-files in Moodle (<https://moodle.jku.at/>) on Wednesday afternoon, one week before the corresponding exercise.
- One week later until Thursday before 8:00 o'clock (Moodle system time), the homework assignment has to be submitted to Moodle (no exceptions). **I really mean no exceptions, it's your responsibility to hand in the correct assignment on time. This means take care that you hand in the correct assignment (no blank pages, not the assignment of last week, pdf-file is not corrupt, solutions are visible, ...) and on time (do not wait till the last minute as technical issues can occur which prevent you from handing in the assignment)**
- Supplemental materials for the course are also available in Moodle.
- The presence course starting at 13:45 is live-streamed and the recording of this live-stream will be available in Moodle for all students until the end of October. You can use this live-streamed/recorded course to get detailed solutions to the examples.
- Once a month, there will be a Zoom-session for discussing course related questions.
- There is an online forum in Moodle to discuss questions related to the homework examples, but not to exchange solutions.

# Homework Assignments & Submission

- On the homework assignments of the distance course, there will be a designated field for your solutions (= final results). Write your solution (not in the color red) in this field. If you don't do so this example will not be counted. Provide only your solution (= final result), no need to provide or attach the calculation details unless it's explicitly stated in the assignment.
- The homework assignments are provided as pdf-files. If you add your solutions directly as comments to the pdf-file make sure the comments are hard-coded into the pdf-file („reprint your pdf-file again as pdf“ to make sure of this) because the Moodle-pdf-viewer can only handle hard-coded comments in pdf-files.
- If some formal problems (e.g. solution is not visible in Moodle-pdf-viewer, format/layout is modified, ...) occur with your submitted pdf-file I will comment this once, so you can solve these problems. If these problems occur a second time, your homework will be considered not submitted (0 points).
- There are no exceptions regarding submissions not on time, blank pdf-files, wrong pdf-files, and so on.
- **Example submission with correction:**

1. During a bike tour of 11 days, the travelled distances for each day (rounded to whole kilometers) were recorded.

39 35 25 37 15 36 50 52 37 51 39

- a) Calculate the average distance travelled. 37,818
- ~~b) Calculate the median of the data. 45~~

Solutions are in the right field and not in the color red

Red line indicates that part b) of this example was false, so one point is deducted

**In case of non-integer results, round the results to 3 decimal places.  
Providing the solutions is sufficient as only correct solutions are counted.**

# Presence Course vs. Distance Course

- In the table below you find the main differences between the two types of courses.

	Presence Course	Distance Course
weekly homework assignments	X	X
weekly physical presence at JKU required	X	
presentation of 5 examples in-class during semester	X	
written exam consisting of 5 examples at the end of semester		X

## **Only Relevant for the Distance Course (course number: 366.594 & 366.595)**

**Q&A via Zoom about submitting homework assignments  
March 11<sup>th</sup> starting at 17:15 o'clock**

**Link for Zoom Meeting: see Moodle**

**In this Zoom meeting I will explain in detail the formal guidelines for submitting the homework assignments. I highly recommend that you join this meeting.**

# Switching between Courses

- Until the first homework assignment is due, you have a limited grace period there you can switch between the distance and presence courses.
- After the first homework assignment was due, you cannot switch between courses (no exceptions).
- If you want to switch courses, send me a mail.

## Further Questions

- In case of any questions you can send me a mail ([thomas.forstner@jku.at](mailto:thomas.forstner@jku.at)) or you can call me (0732/2468/4580) or you can visit me in my office (Computer Science Building, Room S3 625).