



UNIVERSITÄT  
DUISBURG  
ESSEN

*Open-Minded*

# *Programming Paradigms*

Summer Term 2024

# Organisation

- **Lecturer:**  
**Janis Voigtländer, Room LF 233**  
**Area: Formal Methods, Programming Languages**
- **Teaching Assistants:**  
**Marcellus Siegburg, Room LF 232**  
**Oliver Westphal, Room LF 232**
- **Student Assistants:**  
**Mateusz Cygan**  
**Niklas Mecke**  
**Patrick Ritzenfeld**

**To my knowledge, mainly:**

- 1. Bachelor Students “Angewandte Informatik”**
- 2. Bachelor Students “Computer Engineering (ISE)”**

**Some (relevant) lectures you have presumably attended:**

- Grundlegende Programmier Techniken (or ISE equival.)**
- Fortgeschrittene Programmier Techniken (?)**
- Logik (?)**
- Softwaretechnik (?)**

- **Pre-class videos, to be watched each week before Wednesday. (Some marked as optional/background.)**
- **Then, on Wednesdays, 08:15 – 09:45, in LB 131, plenary session with me.**
- **There, I will not “repeat” the video content.**
- **The Wednesday slot is also not for presenting solutions to the exercise tasks.**

**60h „Präsenzleistung“ + 120h „Eigenleistung“**

**My attempt at translating this, during the lecture period:**

- **2–3h per week for preparing with videos and potentially other material**
- **1,5h per week in the Wednesday session**
- **2–3h per week for working on the exercise tasks**
- **1,5h per week in the exercise group**

**Plus 60h exam preparation after the lecture period.**

- **There are weekly exercise groups. Tasks will be given in advance, solutions submitted via Autotool, then discussed in the groups.**
- **Doing the exercises (on your own) is extremely important for being successful in the course and exam.**
- **In particular, there will be a focus on programming concepts and tasks. Such material cannot be learned by heart. It needs practice!**

## Tentative group slots, possibly some merging:

- **Mon, 10:00 – 12:00 or 12:00 – 14:00**
- **Mon, 16:00 – 18:00**
- **Tue, 10:00 – 12:00**
- **Thu, 10:00 – 12:00 and/or 12:00 – 14:00, 14:00 – 16:00**
- **Fri, 08:00 – 10:00**

**Planned to start on Thursday of next week. (really?)**



- **When you submit an exercise solution to Autotool, you will receive immediate feedback. Read it carefully!**
- **If you have individual questions on your submission or on Autotool's feedback, you can use an Autotool feature for direct interaction.**
- **After the submission deadline, your solutions might receive additional feedback (if necessary).**
- **Also, potentially bring up specific questions in the exercise groups.**

- **A written exam is planned for 19<sup>th</sup> August, at 15:30.**
- **The exam will be about the course as taught this term!**
- **The exam tasks will be given (only) in German.**
- **The exam will last 120 minutes.**
- **There are no bonus points for the exam.**

## **Moodle for (among other things):**

- **Link to slides and additional material**
- **Pre-class and post-exercise videos**
- **Exercise tasks (links to Autotool, CodeWorld, ...)**
- **Submission of exercise solutions if not via Autotool**
- **Announcements**
- **Submission of question input for Wednesday sessions**
- **Anonymous forum for exchange between students**

- **In most cases, asking a question in the weekly Moodle questionnaire makes more sense than sending an individual email to me or to the assistants/tutors.**
- **Other potential interaction features have already been mentioned.**
- **If emails are sent at all, they should come from your uni-due.de accounts (or may simply be ignored).**
- **On the other hand, you should check your uni-due.de mail account at least once per (work) day.**
- **Note: I will essentially cease communication after the lecture period (19<sup>th</sup> July).**

- **hopefully still today, availability of the link to slides, and of the first pre-class videos**
- **soonish, availability of the first exercise tasks**
- **probably starting this Friday, enrolment to exercise groups**
- **until next Tuesday, submission of questions via Moodle**
- **next Wednesday, again session with me, and after that again further pre-class videos**
- **at some point, submission of exercise solutions**
- **then, starting with exercise groups**
- **...**

# Some additional remarks

- **Do actually learn the programming languages on offer.**
- **Do solve the exercise tasks each week.  
By programming on your own.**
- **Do not try to learn “just” for (and before) the exam.  
Take the mapped out workload seriously.**

- **Make you better programmers.**
- **Prepare you for programming in languages outside your “comfort zone”.**
- **If you are a Computer Science student, make sure that you eventually holding a Bachelor degree means you actually acquired competencies in different programming paradigms.**
- **Hence (maybe inconveniently for you), make sure that you can't pass the exam without such competencies.**



- **Exam 120 minutes instead of 90 minutes. Exam in German. No bonus points for the exam.**
- **Availability of a lot of previous exams. (But please don't draw the wrong conclusions from that.)**
- **Autotool again available from the start. And most likely our "own" CodeWorld server.**
- **Maybe some "surprise" programming language usage.**
- **Planned: Use of PINGO for more interactivity.**