# **Computer Graphics 1**

### **Tutorial Organization**

Summer Semester 2022 Ludwig-Maximilians-Universität München

### **Tutorials Team**



Changkun Ou changkun.ou@ifi.lmu.de Assistant



Darina Cvetanova d.cvetanova@campus.lmu.de Tutor



Dennis Dietz dennis.dietz@ifi.lmu.de Assistant



Nico Mogicato n.mogicato@campus.lmu.de Tutor

## **Purpose**

- Practice and consolidation of lecture content
- Hands-on activities and discussion
- Addressing issues in doing the assignments
- Opportunity to discuss and ask questions with fellow classmates
- Preparation for future work/research fundamental skills

### **Tutorials**

#### **Darina Cvetanova**

**Tutorial Session 1** 

• Location: Amalienstr. 73A, 018

Time: Tuesday 14:15 - 15:45 (CEST)

**Tutorial Session 2** 

Location: Amalienstr. 73A, 018

Time: Tuesday 16:15 - 17:45 (CEST)

#### **Changkun Ou**

**Tutorial Session 3 (English)** 

• Location: Leopoldstr. 13 H1, 1311

• Time: Tuesday 16:15 - 17:45 (CEST)

#### **Nico Mogicato**

**Tutorial Session 4** 

Location: Amalienstr. 73A, Room 018

Time: Wednesday 14:15 - 15:45 (CEST)

**Tutorial Session 5** 

• Location: Amalienstr. 73A, Room 018

Time: Wednesday 16:15 - 17:45 (CEST)

### **Exam**

- 50% assignment collected points (no bonus points planned) + 50% written exam collected points
- There are 6 individually graded assignments, and submit via Uni2Work.
- In the end of the semester, there is a short written exam (approx. 1 Hour, subject to change).
- We do *not* accept late submissions

### **Retake Exam**

- There will be a retake exam.
- Further details will be announced by the end of the semester.

# Schedule (tentative)

Register tutorial sessions via Uni2Work before April 29 23:59:59 (CEST). Late registration is not possible.

Tutorial Date	Session	Topics	Assignments	Release	Due
May 3rd/4th	01 Introduction	Setup environment, TypeScript, three.js	Assignment 0: Trial Submission	May 3rd, 12:00:00 (CEST)	May 10th, 12:00:00 (CEST)
May 10th/11th	02 Transformation	Linear algebra, affine transformations	Assignment 1: Algebra	May 10th, 12:00:00 (CEST)	May 24th, 12:00:00 (CEST)
May 17th/18th	03 Geometry	Geometric representation			
May 24th/25th	Discussion	Solution of Assignment 1	Assignment 2: Geometry	May 24th, 12:00:00 (CEST)	June 7th, 12:00:00 (CEST)
May 31st, June 1st	04 Camera	MVP camera transformations			
June 7th/08th	Discussion	Solution of Assignment 2	Assignment 3: Camera	June 7th, 12:00:00 (CEST)	June 21st, 12:00:00 (CEST)
June 14th/15th	05 Rasterization	Rasterization			
June 21st/22nd	Discussion	Solution of Assignment 3	Assignment 4: Rasterization	June 21st, 12:00:00 (CEST)	July 5th, 12:00:00 (CEST)
June 28th/39th	06 Texturing	Texture mapping and interpolation			
July 5th/6th	Discussion	Solution of Assignment 4	Assignment 5: Material	July 5th, 12:00:00 (CEST)	July 19th, 12:00:00 (CEST)
July 12nd/13rd	07 Shading	Blinn-Phong Surface Shading			
July 19th/20th	Discussion	Solution of Assignment 5	Assignment 6: Illumination	July 19th, 12:00:00 (CEST)	Aug 2nd, 12:00:00 (CEST)

# **Assignments**

Graphics programming quests per two weeks

Similar format comparing to international programming contest (such as ICPC, CodeForces, LeetCode, etc)

Each task will provide at least one sample input and output

Points are calculated at the end of the semester

Goal: collect points as much as possible

Use the "Assignment 0: Trial submission" as an opportunity to get familiar with the submission process (and collected points in this assignment will not be counted).

# **Cheating Policy**

Suggestion: You don't

Any detected cheating will be excluded from the exam.

### **Contact**

Any questions concerning the course must be sent to the following email address, and any emails that are not delivered to this address will not receive a response:

cg1ss22@medien.ifi.lmu.de