



Chapter 0

Course Overview

Multiple View Geometry
Summer 2020

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Administrative Points

Course Structure

Course Content

1 Administrative Points

2 Course Structure

3 Course Content



- This term this course will (most likely) be offered in a digital format
- We will monitor the developments and may adjust the format dynamically
- Updates can be found on the course webpage:
`https://vision.in.tum.de/teaching/ss2020/mvg2020`
⇒ **check regularly!**
- All correspondence regarding this course should be addressed to `mvg-ss20@vision.in.tum.de`
- Students need to register for the course in **TUMOnline**
- Later during the semester students need to also **register for the exam**
- Please let us know if there are problems with the course structure, or if you have any suggestions



- **Lectures** (starting this week)
 - we will use pre-recorded video lectures
 - we will provide updated lecture slides
- **Exercises** (starting next week)
(together with Mohammed Brahimi, Lukas Köstler)
 - a mix of theoretical and practical exercises (in Matlab)
 - Weekly timeline:
 - *Thu*: we release an exercise sheet
 - *Thu-Wed*: students work on the exercise sheet and send questions regarding **this week's exercises** to us
 - *Fri*: we release an exercise-video that explains solutions to the exercises and covers the most relevant student questions. Moreover, we release solutions to the exercises

⇒ we recommend to stick to this regular schedule
- **Exam**
 - the material covered in the lecture **slides on the course webpage** is relevant
 - the time, date and format will be announced as soon as we know more



- **Q&A page**

- course-related questions or questions regarding previous exercises can be asked via email
- we will collect raised questions along with our answers for all students on our **MVG Q&A page**:

<https://vision.in.tum.de/teaching/ss2020/mvg2020/qa>

⇒ in the interest of your fellow students, please communicate your questions in a concise and comprehensive way

- **Student chatroom:**

- Matrix chatroom to facilitate inter-student communication (see course webpage)
- use your **real name**
- not an official communication channel to reach us. Use email for this



This course will cover:

- reconstructing 3D geometry from 2D images
- basic concepts of image formation
- mathematical tools
 - linear algebra basics
 - rigid body motion
 - perspective projection
 - various optimisation techniques