universität freiburg

FreiCAR: Practical Autonomous Driving Winter semester 2025/26, Robot Learning Lab

Syllabus

<u>Date</u>	<u>Topic</u>	<u>Assignments</u>
15.10.	Course overview + Introduction to ROS	Form teams of 3 students
22.10.	Lecture "Control"	M1 released: "Control"
29.10.	Student presentations M1	M1 due M2 released: "Mapping"
05.11.	Lecture "Mapping & Lane Graphs"	M3 released: "Lane Graph"
12.11.	Student presentations M2	M2 due
19.11.	Student presentations M3	M3 due M4 released: "Planning & Navigation"
26.11.	Lecture "Perception & SLAM"	
03.12.	Student presentations M4	M4 due M5 released: "Vision-Based Lane Following"
10.12.		
17.12.	Student Presentations M5	M5 due M6 released "Map-Aware, Perception-Guided Navigation"
22.12 - 08.01.	Christmas break Robot hall closed	
14.01.	Competition announcement	C1 released: "Collision Avoidance"
21.01.	Student Presentations M6	M6 due
28.01.		
04.02.	Competition day	C1 due

Weekly class: building 080, room 00.021, Wednesday at 10:00 - 12:00

TA office hour: building 078, Tuesday 13:00 - 15:00, Friday 12:00 - 14:00

Grading: 80% milestones + 20% competition

Communication: The course content (lecture slides, assignments, ...) will be provided via Slack.

Last updated: Oct. 22, 2025 (v2)