Robotics and Navigation in Medicine: Schedule
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Schedule – Summer Term 2023
Robotics and Navigation in Medicine

Date	Lecture	Tutorial	Project Milestones
06.04.	Introduction & ROS tutorial	–	–
13.04.	Robotics: Basic principles	ROS tutorial	**Registration form**
20.04.	Robotics: Kinematics	Transformations	–
27.04.	Robotics: Paths and trajectories	Direct kinematics	**Project plan**
04.05.	Navigation: Calibration	Inverse kinematics	Direct kinematics
11.05.	Navigation: Localization	Inverse kinematics and camera calibration	–
25.05.	Navigation: Image guidance	Path planning and trajectory planning	**Inverse kinematics***
01.06.	–	Parallel kinematics and localization	Camera calibration
08.06.	–	–	First week at Lab
16.06.	–	–	Trajectory planning & Hand-Eye calibration
23.06.	–	–	Model recording and registration
30.06.	–	–	Planning of feasible needle paths
06.07.	–	–	Project finalization
10.07-13.07.	–	–	**Project presentation**
15.08.	–	–	**Project report**

Bold milestones are deadlines that are **mandatory** and directly affect bonus point grading. Other milestones should serve as a guideline for the project plan.

* Working inverse kinematic required to work with robot on site.