Practical classes FS01 – WS 2024/2025

	Date	Schedule
1	23.9.	Levelling - part 1: principles, instruments, reading of levelling rods, registration of measured data, calculation of a levelling field book. 1st homework - Calculation of the levelling field book.
2	30.9.	Levelling - part 2: practical measuring in the field. Calculation and adjustment of a levelling line.
3	7.10.	Total stations - part 1: total station Trimble M3 - description, optical centering, levelling, reading, pointing, horizontal and zenith angles booking and calculating, measurement of a horizontal angle in one set (face left and face right positions of the telescope), measurement of a zenith angle. **1st test** - Calculation of a levelling field book. 2nd homework - Calculation of horizontal directions and zenith angles.
4	14.10.	Total stations - part 2: total station Trimble M3 -, angular and distance measurement without registration. **2nd test** - Calculation of horizontal and vertical angles.
5	21.10.	Total stations - part 3: total station Trimble M3 - software, registration of a measurement, communication with a computer, tacheometry, data collecting, setting-out. 3rd homework - Spatial polar method, setting-out elements.
6	4.11.	GNSS - part 1: interpolation of contour lines, Global navigation satellite system - introduction, basic principles, GPS Trimble GeoXR - description, software, demonstration of measurement and calculations. **3rd test** - Spatial polar method, setting-out elements. 4th homework - Interpolation of contour lines.
7	11.11.	GNSS - part 2: Practical measuring in the field, comparison of results with other surveying methods.
8	18.11.	Situation: measurement of the planimetry for the creating special-purpose plan.
9	25.11.	Tacheometry: tacheometric measurement for creating contour line plan.
10	2.12.	Interior: measurement of building interior, creation of drawing documentation.
11	9.12.	Setting-out: setting-out of the object using total station.
12	16.12.	Working with map: basic cartographic measurements and calculations, altitude measurement, measurement of volume and area. **ASSESSMENT**

CTU, FCE, Department of Special Geodesy
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