

## Practical classes FS01 – ZS 2020/2021

	Date	Schedule
1	21.9.	Levelling - part 1: principles, instruments, reading of levelling rods, registration of measured data, calculation of a levelling field book. 1 <sup>st</sup> homework - Calculation of the levelling field book.
2	5.10.	Levelling - part 2: practical measuring in the field. Calculation and adjustment of a levelling line.
3	12.10.	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. <b>1<sup>st</sup> test</b> - Calculation of a levelling field book. 2 <sup>nd</sup> homework - Calculation of horizontal directions and zenith angles.
4	19.10.	Total stations - part 2: total station Trimble M3 -, angular and distance measurement without registration. <b>2<sup>nd</sup> test</b> - Calculation of horizontal and vertical angles.
5	26.10.	Total stations - part 3: total station Trimble M3 - software, registration of a measurement, communication with a computer, tacheometry, data collecting, setting-out. 3 <sup>rd</sup> homework - Spatial polar method, setting-out elements.
6	2.11.	GNSS - part 1: interpolation of contour lines, Global navigation satellite system - introduction, basic principles, GPS Trimble GeoXR - description, software, demonstration of measurement and calculations. <b>3<sup>rd</sup> test</b> - Spatial polar method, setting-out elements. 4 <sup>th</sup> homework - Interpolation of contour lines.
7	9.11.	GNSS - part 2: Practical measuring in the field, comparison of results with other surveying methods.
8	19.11.	Situation: measurement of the planimetry for the creating special-purpose plan.
9	23.11.	Tacheometry: tacheometric measurement for creating contour line plan.
10	30.11.	Interior: measurement of building interior, creation of drawing documentation.
11	7.12.	Setting-out: setting-out of the object using total station.
12	14.12.	Working with map: basic cartographic measurements and calculations, altitude measurement, measurement of volume and area. <b>ASSESSMENT</b>

CTU, FCE, Department of Special Geodesy  
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