

# Numerical methods 2022 spring

courses	EN1	EN2
lecturers	Koppányi Zoltán	Tóth Gyula
place	K142a,b	Kf27c
	Thu 8-10	Wen 10-12
<b>week</b>	<b>#Fri 10-12</b>	<b>#Fri 12-14</b>
<b>1.</b>	M1	M1
<b>2.</b>	M2,ERR	M2,ERR
<b>3.</b>	NL1	NL1
<b>4.</b>	LIN1,LIN2	LIN1,LIN2
<b>5.</b>	NL2	NL2
<b>6.</b>	REG (T1), IP1	REG (T1), IP1
<b>7.</b>	MT1 (03.31.)	MT1 (03.30.)
<b>8.</b>	IP2,-	IP2,-
<b>9.</b>	-	DIF
<b>10.</b>	DIF,INT	-,INT
<b>11.</b>	OP1	OP1
<b>12.</b>	OP2,ODE1	OP2,ODE1
<b>13</b>	ODE2 (T2)	ODE2 (T2)
<b>14.</b>	M3+P2,MT2 (05.20.)	M3+P2,MT2 (05.20.)
<b>classes off:</b>	<b>4x45 min</b>	<b>4x45 min</b>

Practices exercises (3p)	Available
1: M1-M3	02.14-03.13.
2: NL1	02.28-03.13
3: LIN 1-2	02.28.-03.20.
4: NL2	03.16-04.03.
5: REG,IP1	03.21.-04.10.
6: IP2	04.04-04.24.
7: DIF	04.11.-05.01.
8: INT	04.11-05.08.
9: OP 1-2	04.25-05.15.
10: ODE 1-2	05.02.-05.29.

T1,T2 - 5 minutes tests

Retake of the first mid-term test: May 24. 10.15., Retake of the second mid-term test: May.25, 10.15

Days off: 5.week: 03.14.Mon (work instead: 03.26. Saturday), 03.15.Tue, 8.week: 04.08.Fri, 9-10.week: 04.14-04.20 (1 week spring vacation)

	Lectures:	Code		Lectures:	Code
<b>1.</b>	Matlab basics 1.	M1	<b>12.</b>	Matlab 3D Graphics (optional)	M3
<b>2.</b>	Matlab basics 2.	M2	<b>13.</b>	2-D interpolation, regression	IP2
<b>3.</b>	Computational errors	ERR	<b>14.</b>	Numerical differentiation	DIF
<b>4.</b>	Nonlinear equations	NL1	<b>15.</b>	Numerical integration	INT
<b>5.</b>	System of linear equations 1.	LIN1	<b>16.</b>	Optimization 1.	OP1
<b>6.</b>	System of linear equations 2.	LIN2	<b>17.</b>	Optimization 2.	OP2
<b>7.</b>	System of nonlinear equations	NL2	<b>18.</b>	Ordinary Differential Equations 1.	ODE1
<b>8.</b>	1-D regression	REG	<b>19.</b>	Ordinary Differential Equations 2.	ODE2
<b>9.</b>	1-D interpolation	IP1	<b>20.</b>	(Practice 2 - overview - optional)	P2
<b>10.</b>	(Practice 1 - overview - optional)	P1	<b>21.</b>	Midterm test 2	MT2
<b>11.</b>	Midterm test 1	MT1			