

MAT 103

MATHEMATICS 1

Learning Outcomes

MATHEMATICS DEPARTMENT

Mat103-Mat103E-Mat101-Mat101E(Mathematics 1)
Mat104-Mat102-Mat102E(Mathematics 2)

Mat 201-I (Differential Equations)
Mat261 (Linear Algebra)

Faculty	Program	1th Semester		2nd Semester		3rd Semester		4th Semester	
IS	END Industrial Eng.	103	261	104		201E			
	ISL Managment Science and Eng.	103		104		201E	261		
FE	BIO Molecular Biology and Genetics	103		104		201			261
	FIZ Physics Eng.	101	261	102		201			
	KIM Chemistry	103		104		201			
MD	JEF Geophysical Eng.	101	261	102		201			
	JEO Geological Eng.	101		102		201			
	PET Petroleum and Natural Gas Eng.	101		102		201			
	MAD Mining Eng.	101		102		261			201
	CHZ Mineral Processing Eng.	101		102		201			
INB	INS Civil Eng.	101E		102E		201			
	JDF Geodesy and Photogammetry Eng (GEO Geomatics Eng.)	101		102		201			
	CEV Environmental Eng.	103		104		201			
UU	UCK Aeronautical Eng.	101/103		102/104	261	201			
	UZB Astronautical Eng.	101/103		102/104	261	201			
	MTO Meteorological Eng.	101		102	261	201			
MK	MAK Mechanical Eng.	103		104	261	201			
	IML Manufacturing Eng.	103		104		201			261
EE	ELE Electronics Eng.	101E	281*	102E		201			
	TEL Telecommunication Eng.	101E	281*	102E		201			
	ELK Electrical Eng.	101E	281*	102E		201			
	KON Control Eng.	101E	281*	102E		201			
BB	BLG Computer Eng.	101E	281E*	102		201			
KM	KMM Chemical Eng.	103		104		201E			
	MET Meallurgical and Materials Eng.	103		104		201			
	GID Food Eng.	103		104		201E			
GD	GEM Naval Architecure and Marine Eng.	103	261	104		201E			
	DEN Ship Building and Ocean Eng.	103	261	104		201E			
MM	MIM Architecture	103E							
	SBP Urban and Regional Planning	103E							
	EUT Industrial Product Design	103E							
	ICM Interior Architecture	103E							
	PEM Landscape Architecture	103E							
TT	TEK Textile Eng.	103		104		261			201

Mat281-Mat281E-(Linear Algebra and Applications)course given by the Faculty of Electrical and Electronic Eng

MAT-103

SPRING 2017

I. Tek deęişkenli fonksiyonlarda Limit ve süreklilik kavramlarını kullanabilme,	I. Compute the limit of various functions, use the concepts of the continuity, use the rules of differentiation to differentiate functions.
II. Fonksiyonların grafięinin, asimptot, kritik nokta, azalan/artan ve konkavlıęının incelenerek çizilmesi,	II. Sketch the graph of a function using asymptotes, critical points and the derivative test for increasing/decreasing and concavity properties.
III. Maksimum minimum problemlerinin kurulması ve çözülmesi,	III. Set up max/min problems and use differentiation to solve them.
IV. Integral Hesabın Esabı Esas Teoremini kullanarak belirli integral hesabı ve alan hacim , uzunluk hesabını belirli integral yardımıyla çözebilme,	IV. Evaluate integrals by using the Fundamental Theorem of Calculus and apply integration to compute areas and volumes by slicing, volumes of revolution, arclength.
V. Transandan Fonksiyonlarla işlem yapma ve integral alma tekniklerini uygulama,	V. Work with transcendental functions and evaluate integrals using techniques of integration.
VI. Belirsizlik şekilleri ve L'Hopital kuralı yardımıyla limit bulabilir.	VI. Use L'Hospital's rule.

MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓		✓
✓	✓	✓	✓
		✓	

AVERAGE

15.5 18.2 18.6 14.9

14.2 15.3 15.6 16.3

AVERAGE %

62% 73% 74% 60%

57% 61% 62% 65%

MAT-103

FALL 2016

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓		✓
✓			✓
		✓	

AVERAGE

13.3 17.3 11.6 19.9

13.4 14.9 17.9 17.0

AVERAGE %

53% 69% 46% 80%

54% 60% 71% 68%

MAT-103

SUMMER 2016

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	✓
✓	✓	✓	✓
			✓

AVERAGE

16.3 11.4 15.3 19.5

16.7 14.9 13.8 15.0

AVERAGE %

65% 45% 61% 78%

67% 60% 55% 60%

MAT-103

SPRING 2016

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	
✓			
			✓

AVERAGE

14.2 14.8 12.7 15.4

17.7 16.2 11.7 18.6

AVERAGE %

57% 59% 51% 62%

71% 65% 47% 75%

MAT-103

FALL 2015

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
		✓	✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	✓
✓			
	✓		

AVERAGE

15.0 18.5 14.7 14.9

16.2 14.1 16.8 14.8

AVERAGE %

60% 74% 59% 59%

65% 57% 67% 59%

MAT-103

SUMMER 2015

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25

✓	✓	✓	
			✓

AVERAGE

20.2	18.5	18.5	14.8
-------------	-------------	-------------	-------------

AVERAGE %

81%	74%	74%	59%
------------	------------	------------	------------

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25

		✓	✓
✓			
	✓		

13.3	18.5	15.5	14.3
-------------	-------------	-------------	-------------

53%	74%	62%	57%
------------	------------	------------	------------

MAT-103

SPRING 2015

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓
✓			

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	✓
✓			✓
			✓

AVERAGE

13.6 12.2 14.9 15.4

14.2 13.4 15.0 16.8

AVERAGE %

54% 49% 59% 62%

57% 54% 60% 67%

MAT-103

FALL 2014

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
		✓	✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	
✓			
			✓

AVERAGE

18.7 18.0 19.2 19.1

10.5 16.8 14.7 12.1

AVERAGE %

75% 72% 77% 76%

42% 67% 59% 48%

MAT-103

SUMMER 2014

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MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25
✓	✓	✓	
			✓

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25
	✓	✓	✓
✓			
		✓	

AVERAGE

16.1 17.2 14.8 19.8

15.8 18.2 15.3 12.9

AVERAGE %

64% 69% 59% 79%

63% 73% 61% 52%

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AVERAGE

AVERAGE %

MAT-103

MIDTERM

Q-1	Q-2	Q-3	Q-4
25	25	25	25

✓	✓	✓	
			✓

16.1	16.6	12.8	18.4
-------------	-------------	-------------	-------------

64%	66%	51%	73%
------------	------------	------------	------------

SPRING 2014

FINAL

Q-1	Q-2	Q-3	Q-4
25	25	25	25

	✓	✓	✓
✓			
			✓

16.9	12.7	10.3	14.5
-------------	-------------	-------------	-------------

67%	51%	41%	58%
------------	------------	------------	------------