MATH 118 CALCULUS II, SUMMER 2022

Classes will start on Monday, July 25.

Attendance: Attendance will be taken **every** hour.

- Students who do not attend 22 hours or more will get NA grade IF they do not get a passing grade (DD) from the exams. In other words, those who get DD or higher from the exams WILL NOT be penalized if they do not attend enough lectures.
- Students who miss at most 3 hours will get bonus 4 points.
- Students who miss at most 4 hours will get bonus 3 points.
- Students who miss at most 5 hours will get bonus 2 points.
- Students who miss at most 7 hours will get bonus 1 point.

Course Instructors: Belgin Korkmaz, Mustafa Korkmaz

Lectures: Section 1: Mon-Th 9:00-11:50, Fri 9:00-10:50 M07

Section 2: Mon-Th 14:00-16:50, Fri 14:00-15:50 M07

Section 3: Mon-Th 9:00-11:50, Fri 9:00-10:50 M04

Section 4: Mon-Th 14:00-16:50, Fri 14:00-15:50 M04

Grading: Exam 1: 33 points, August 4, Thursday, 18:00
Exam 2: 33 points, August 18, Thursday, 18:00
Final: 34 points, September 3, Saturday, 09:00

Suggested textbook: CALCULUS A Complete Course Calculus. Eight Edition. Robert A. Adams, Christopher Essex

Reference Book: CALCULUS, James Stewart.

Week	Dates	Syllabus (Math 118) 2021-Summer	
1	July 25-29	**Ch 6: Techniques of Integration** 6.1 Integration by Parts 6.2 Integrals of Rational Functions 6.3 Inverse Substitutions 6.5 Improper Integrals **Ch 7: Applications of Integration** 7.1 Volumes by Slicing-Solids of Revolution	**6.1**: 5, 7, 10, 11, 13, 15, 17, 19, 21, 23, 25, 27, 28, 29, 33, 37 **6.2:**3,5,7,9,11,13,15,1719,21, 23, 25, 27, 29, 31 **6.3**:3,5,7,9,11,13,15,1719,21,23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 44, 45, 47, 49, 51 **6.5**:1,3,5,7,9,11,13,15,17, 19,21, 23, 24, 25, 31, 33, 35, 37, 39, 41,42 **7.1**: 1, 3, 7, 11, 13, 15, 19
2	August 1-5	7.2 More Volumes by Slicing 7.3 Arc Length and Surface Area **Ch. 9: Sequences, Series, and Power Series** 9.1 Sequences and Convergence 9.2 Infinite Series 9.3 Convergence Tests for Positive Series (Exam 1: August 4 Thursday 18:00)	**7.2:** 3, 5, 7, 9, 11, 13,16 **7.3:**3,5,7,9,11,13,14,2124,25, 27, 28, 29 **9.1**:6,8,10,17,18,19,24,26,29,31, 35 **9.2 :** 4,6, 8 ,10, 12, 14, 26, 27, 28, 29,30,31 **9.3:**4,6,12,16,18,20,24,26,38,42
3	August 8-12	9.4 Absolute and Conditional Convergence 9.5 Power Series 9.6 Taylor and Maclaurin Series 9.7 Applications of Taylor and Maclaurin Series	**9.4**: 2,4,8,10,16,20,24,27 **9.5**:4,8,10,13,14,17,18,22,26,28, 30 **9.6:** 6,8,12,18,22,26,34,35,40 **9.7** 6,7,12,16,18,24
4	August 15-19	**Ch. 10: Vectors and Coordinate Geometry in3-Space** 10.1 Analytic Geometry in Three Dimensions 10.2 Vectors 10.3 The Cross Product in 3-Space 10.4 Planes and Lines 10.5 Quadric Surfaces (Exam 2: August 18 Thursday 18:00)	**10.1**: 6,19,22,27,32,36,40 **10.2**: 4,13,16,18,22,26,31 **10.3**: 3,5,14,15,17,20,23 **10.4**: 3,6,9,18,23,26,28,29 **10.5**: 3,5,8,10,12,15,17,20,21
5	August 22-26	**Ch. 12: Partial Differentiation** 12.1 Functions of Several Variables 12.2 Limits and Continuity 12.3 Partial Derivatives 12.5 The Chain Rule 12.6 Linear Approximations 12.7 Gradients and Directional Derivatives	**12.1:** 4,5,8,12,13,14,20,24 **12.2**: 2,6,8,10,12,14,18 **12.3**:4, 5, 6, 11, 12, 16,17, 21, 24, 28, 31, 36, 39 **12.5**: 4,8,16,18,29,30 **12.6**: 4,6,10,16 **12.7**: 4,8,10,17,18,19,22,26,36
6	August 29-Sept 1	**Ch. 13: Applications of Partial Derivatives** 13.1 Extreme Values 13.2 Extreme Values of Functions Defined onRestricted Domains 13.3 Lagrange Multipliers **Ch. 14: Multiple Integration** 14.1 Double Integrals 14.2 Iteration of Double Integrals in Cartesian Coordinates (Final Exam: September 3, Saturday, 09:00)	**13.1**: 1, 3, 6, 7, 9, 11, 17, 19, 24, 26 **13.2:** 3,5,7,8,9,11,17 **13.3**: 1,3,5,7,9,11,19,21,22 **14.1**: 5,13,15,18,19 **14.2**: 1,3,5,7,9,11,13,15, 17,19,21, 23,25,27