Tentative Schedule for MTH 351 Winter 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Jan	6 Introduction	7	8 Taylor approximation (1.1)	9	10 Error estimate of Taylor approximation (1.2)
Jan	13 Floating-point numbers (2.1)	14	15 Rounding, adding, multiplying floating-point numbers	16	17 HW 1 due Practice on floating-point numbers
Jan	20 No class (Martin Luther King day)	21	22 Consequences of floating-point arithmetic (2.2, 2.3)	23	24 HW 2 due Root-finding problem. Bisection method (3.1)
Jan	27 Bisection method – Error estimates (3.1)	28	29 Newton's method (3.2)	30	31 HW 3 due Newton's method for multivariate functions
Feb	3 Newton's method – Error estimates and difficulty (3.2)	4	5 Fixed point method (3.4)	6	7 Midterm review
Feb	10 Midterm exam (in class)	11	12 Order of convergence (3.4)	13	14 HW 4 due Efficiency of a numerical method
Feb	17 Interpolation problems	18	19 Polynomial interpolation, Lagrange's formula (4.1.3)	20	21 HW 5 due Compute polynomial interpolation with Matlab
Feb	24 Polynomial interpolation, Newton's formula (4.1.6)	25	26 Practice on Newton's formula; error estimates (4.2.1)	27	28 HW 6 due Runge's phenomenon (4.2.2)
Mar	2 Numerical integration, Riemann integrals	3	4 Practice on Riemann integrals	5	6 HW 7 due Error estimates of left, right, mid, trapezoid rule (5.2.1)
Mar	9 Computational method to determine rate of convergence	10	11 Simpson's rule (5.1.1)	12	13 (last day of class) HW 8 due Final exam review
Mar	16	17	18	19 Final exam 2 – 3:50 PM, Location TBA	20