# Tentative Topics Schedule

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See Books & Online Resources List for the reading materials.

The readings are not mandatory but it is encouraged.

The "Reading" column in the table below contains page number on which it refers to a label in the Books & Online Resources List. For example "Pgs. 58-63 [CSV]" refers to pages 58-63 of the first item in the list, which is our main text book titled "Calculus: Single Variable (7th ed)".

### Topics and Materials

Week	Day	Topic	Desmos	${f WeBWork}$	Lab	Reading
1	M 8/28	Introduction & Orientation	-	-	Assigned: Lab 0	Syllabus
-	W 8/30	1.7 Limits and Continuity	TBA	Due: Precalculus Diagnostic Quiz	-	Pgs. 58-63 [CSV]
-	Th 8/31	1.8 Extending the Idea of a Limit	TBA	<u>-</u>	-	Pgs. 67-72 [CSV]
-	F 9/1	1.9 Limits and Algebra	TBA	Due: Section 1.7	-	Pgs. 75-80 [CSV]
2	M 9/4	2.1 Measuring Speed	TBA	Due: Section 1.8	-	Pgs. 84-88 [CSV]
-	W 9/6	2.2 Derivative at a Point	TBA	Due: Section 1.9	-	Pgs. 91-95 [CSV]
-	Th $9/7$	Lab 1: Limits and Continuity	-	-	Assigned: Lab 1	-
-	F 9/8	Proficiency QuizL1, L2	-	Due: Section 2.1	Due: Lab 0	-
3	M 9/11	2.3 Derivative Function Preview	TBA	Due: Section 2.2	-	Pgs. 99-104 [CSV]
-	W 9/13	2.3 Derivative Function	TBA	-	-	-

Week	Day	Topic	Desmos	${\bf WeBWork}$	Lab	Reading
-	Th 9/14	2.4 Interpreting the	TBA	-	-	Pgs. 108-110 [CSV]
-	F 9/15	Derivative Proficiency QuizL2, L3, D1Retakes: L1	-	Due: Section 2.3	Due: Lab 1	-
4	M 9/18	2.5 Second Derivative	TBA	Due: Section 2.4	-	Pgs. 115-119 [CSV]
-	$\le 9/20$	2.6 Differentiability	TBA	Due: Section 2.5	-	Pgs. 123-126 [CSV]
-	Th 9/21	Lab 2: Corona Virus Cases	-	-	Assigned: Lab 2	_
-	F 9/22	Proficiency QuizA1, D2Retakes: L1, L2, L3, D1	-	Due: Section 2.6	-	-
5	M 9/25	3.1 Powers and Polynomials	TBA	-	-	Pgs. 130-136 [CSV]
-	W 9/27	Review: Exponent Properties	TBA	Due: Section 3.1	-	-
-	Th 9/28	3.2 The Exponential Function	TBA	-	-	Pgs. 140-142 [CSV]
-	F 9/29	Proficiency QuizD1, D3Retakes: L2, L3, D2, A1	-	Due Exponent Review	Due: Lab 2	-
6	M 10/2	3.3 Product and Quotient Rule	TBA	Due: Section 3.2	-	Pgs. 144-147 [CSV]
-	W 10/4	3.4 Chain Rule	TBA	Due: Section 3.3	-	Pgs. 151-155 [CSV]
-	Th 10/5	Review: Trigonome- try	TBA	-	-	-
-	F 10/6	Proficiency QuizD4, D5Retakes: L2, D1, D2, D3, A1	-	Due: Section 3.4	-	-
7	M 10/9	3.5 Trig Functions	TBA	Due: Trig ReviewDue: Inverses Review	-	Pgs. 158-162 [CSV]

Week	Day	Topic	Desmos	${\bf WeBWork}$	Lab	Reading
-	W 10/11	3.6 Chain Rule and Inverse Functions	TBA	Due: Section 3.5	-	Pgs. 164-167 [CSV]
-	Th 10/12	Lab 3: All Derivative Rules	-	-	Assigned: Lab 3	-
-	F 10/13	Proficiency QuizD5, D6Retakes: D1, D3, D4	-	Due: Section 3.6	-	-
8	M 10/16	Fall Break	-	-	-	-
-	W 10/18	Fall Break	-	-	-	-
-	Th $10/19$	Fall Break	-	-	-	-
_	F 10/20	Fall Break	-	-	-	-
9	M 10/23	3.7 Implicit Differentia- tion	TBA	Due: Derivative Practice	-	Pgs. 171-173 [CSV]
-	$W\ 10/25$	3.9 Linear Approxima- tion	TBA	Due: Section 3.7	-	Pgs. 178-182 [CSV]
-	Th $10/26$	4.1 Using Derivative	TBA	-	Due: Lab 3	Pgs. 192-198 [CSV]
-	F 10/27	Proficiency QuizD7, D8Retakes: D4, D5, D6	-	Due: Section 3.9Due: Section 3.10	-	-
10	M 10/30	4.2 Optimization	TBA	Due: Section 4.1	-	Pgs. 203-208 [CSV]
-	W 11/1	4.3 Optimization Cont.	TBA	-	-	Pgs. 212-218 [CSV]
-	Th 11/2	Lab 4: Global Warming	-	-	Assigned: Lab 4	-
-	F 11/3	Proficiency QuizA1, D8Retakes: D5, D6, D7	-	Due: Section 4.2	-	-
11	M 11/6	4.3 Optimization	TBA	Due: Section 6.3	-	-
-	W 11/8	4.4 Families of Functions	TBA	Due: Section 4.3	-	Pgs. 224-229 [CSV]
-	Th 11/9	4.6 Related Rates	TBA	-	Due: Lab 4	Pgs. 243-246 [CSV]
-	F 11/10	Proficiency QuizA2, A3Retakes: D5, D7, D8, A1	-	Due: Section 4.4	-	<u>:</u>
12	M 11/13	4.6 Related Rates Cont.	TBA	-	-	-

Week	Day	Topic	Desmos	${\bf WeBWork}$	Lab	Reading
-	W 11/15	4.7 L'Hopital	TBA	Due: Section 4.6	-	Pgs. 252-256 [CSV]
-	Th 11/16	5.1 Distance Traveled	TBA	-	-	Pgs. 272-278 [CSV]
-	F 11/17	Proficiency QuizA2, A3Retakes: Any	-	Due: Section 4.7Due: Section 4.8	-	-
13	M 11/20	5.2 Definite Integral	TBA	Due: Section 5.1	-	Pgs. 283-288 [CSV]
-	W 11/22	Lab 5: Applications	-	Due: Section 5.2	Assigned: Lab 5	-
-	Th $11/23$	Thanksgiving Vacation	-	-	-	-
-	F 11/24	Thanksgiving Vacation	-	-	-	-
14	M 11/27	5.3 Funda- mental Theorem of Calculus Part 1	TBA	-	-	Pgs. 292-297 [CSV]
-	W 11/29	5.4 Theorems About Integrals	TBA	Due: Section 5.3	-	Pgs. 302-309 [CSV]
-	Th 11/30	6.1 Antiderivatives (Numerically & Graphically)	TBA	-	Due: Lab 5	Pgs. 316-317 [CSV]
-	F 12/1	Proficiency QuizI1, I2Retakes: L4, A2, A3, A4	-	Due: Section 5.4	-	-
15	M 12/4	6.2 Antiderivatives (Analytically)	TBA	Due: Section 6.1Due: Section 6.2	-	Pgs. 322-326 [CSV]
-	W 12/6	6.4 Fundamental Theorem of Calculus Part 2	TBA	-	-	Pgs. 335-338 [CSV]
-	Th 12/7 F 12/8	Review Proficiency QuizI2, I3Retakes: L4, A2, A3, A4	-	Due: Section 6.4	-	-

Week	Day	Topic	Desmos	${\bf WeBWork}$	Lab	Reading
-	Tu 12/12	Final ExamTu 10:30 AM - 12:30 PM	-	-	-	-

### Books & Online Resources Lists

# Main Textbook

[CSV] Calculus: Single Variable (7th ed), by Hughes-Hallett, Gleason, McCallum, et al (Wiley, 2009).