MAT 181-050 – COURSE SCHEDULE SPRING SEMESTER 2024 (subject to change)

| DATE | MATERIAL COVERED IN LECTURE | To do for next class |
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| | | Assignments due |
| M: Jan 22 | Intro to Course | Read §1.1-1.2 |
| | §1.1: Functions | |
| T: Jan 23 | §1.2: Function Repertory | Read §1.3 |
| W: Jan 24 | §1.3: Transforming Functions | Read §1.4 |
| F: Jan 26 | §1.4: Inverse Functions | |
| M: Jan 29 | CHAPTER 1 CATCH-UP | Read §2.2 |
| T: Jan 30 | §2.2: Limits All Around the Plane | |
| W: Jan 31 | §2.2 Continued | |
| F: Feb 2 | §2.2 Continued | Read §2.4 |
| | - | e e |
| | D2L Quiz 1 | HWI |
| M: Feb 5 | D2L Quiz 1 §2.4 Determining Limits of Functions | HW I Read §2.4 |
| M: Feb 5 T: Feb 6 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued | HW I Read §2.4 |
| M: Feb 5 T: Feb 6 W: Feb 7 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued | HW I Read §2.4 Read §2.5 |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity | HW I Read §2.4 Read §2.5 |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity D2L Quiz 2 | HW I Read §2.4 Read §2.5 HW II |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 M: Feb 12 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity D2L Quiz 2 §2.5 Continued | HW I Read §2.4 Read §2.5 HW II |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 M: Feb 12 T: Feb 13 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity D2L Quiz 2 §2.5 Continued CATCH-UP ON LIMITS | HW I Read §2.4 Read §2.5 HW II WW 1.1–1.4, 2.2, 2.4 |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 M: Feb 12 T: Feb 13 W: Feb 14 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity D2L Quiz 2 §2.5 Continued CATCH-UP ON LIMITS EXAM I | HW I Read §2.4 Read §2.5 HW II WW 1.1–1.4, 2.2, 2.4 Read §2.1 |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 M: Feb 12 T: Feb 13 W: Feb 14 | D2L Quiz 1§2.4 Determining Limits of Functions§2.4 Continued§2.4 Continued§2.5 Continuity D2L Quiz 2§2.5 ContinuedCATCH-UP ON LIMITSEXAM I Sections 1.1-1.4, 2.2, 2.4, 2.5 | HW I Read §2.4 Read §2.5 HW II WW 1.1–1.4, 2.2, 2.4 Read §2.1 |
| M: Feb 5 T: Feb 6 W: Feb 7 F: Feb 9 M: Feb 12 T: Feb 13 W: Feb 14 F: Feb 16 | D2L Quiz 1 §2.4 Determining Limits of Functions §2.4 Continued §2.4 Continued §2.5: Continuity D2L Quiz 2 §2.5 Continued CATCH-UP ON LIMITS ExAM I Sections 1.1-1.4, 2.2, 2.4, 2.5 §2.1: Rates of Change and | HW I Read §2.4 Read §2.5 HW II WW 1.1–1.4, 2.2, 2.4 Read §2.1 Read §2.6 |

| DATE | MATERIAL COVERED IN LECTURE | To do for next class |
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| | | Assignments due |
| M: Feb 19 | §2.6: The Derivative | Read §3.1 |
| T: Feb 20 | §3.1: Differentiation Notation | |
| W: Feb 21 | §3.1 Continued | |
| F: Feb 23 | §3.1 Continued | Read §3.2 |
| | D2L Quiz 3 | HW III |
| M: Feb 26 | §3.2: Derivatives of Polynomials, Exponentials, Products, and Quotients | |
| T: Feb 27 | §3.2 Continued | Read §3.3 |
| W: Feb 28 | §3.3: Derivatives of Trig Functions | Read §3.4 |
| F: Mar 1 | §3.4: The Chain Rule | Read §3.5 |
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| | D2L Quiz 4 | HW IV |
| M: Mar 4 | D2L Quiz 4 §3.5: Implicit Differentiation | HW IV Read §3.6 |
| M: Mar 4 T: Mar 5 | D2L Quiz 4 §3.5: Implicit Differentiation §3.6: Derivatives of Inverse Functions | HW IV Read §3.6 |
| M: Mar 4 T: Mar 5 W: Mar 6 | D2L Quiz 4§3.5: Implicit Differentiation§3.6: Derivatives of Inverse FunctionsCATCH-UP ON DERIVATIVES | HW IV Read §3.6 WW 2.1, 2.5, 2.6, 3.1–3.4 |
| M: Mar 4 T: Mar 5 W: Mar 6 F: Mar 8 | D2L Quiz 4§3.5: Implicit Differentiation§3.6: Derivatives of Inverse FunctionsCATCH-UP ON DERIVATIVESEXAM II Sections 2.1, 2.6, 3.1-3.6 | HW IV Read §3.6 WW 2.1, 2.5, 2.6, 3.1–3.4 |
| M: Mar 4 T: Mar 5 W: Mar 6 F: Mar 8 M: Mar 11 | D2L Quiz 4§3.5: Implicit Differentiation§3.6: Derivatives of Inverse FunctionsCATCH-UP ON DERIVATIVESExam II Sections 2.1, 2.6, 3.1-3.6SPRING BREAK NO CLASS | HW IV Read §3.6 WW 2.1, 2.5, 2.6, 3.1–3.4 |
| M: Mar 4 T: Mar 5 W: Mar 6 F: Mar 8 M: Mar 11 T: Mar 12 | D2L Quiz 4§3.5: Implicit Differentiation§3.6: Derivatives of Inverse FunctionsCATCH-UP ON DERIVATIVESExam II Sections 2.1, 2.6, 3.1-3.6SPRING BREAK NO CLASSSPRING BREAK NO CLASS | HW IV Read §3.6 WW 2.1, 2.5, 2.6, 3.1–3.4 |
| M: Mar 4 T: Mar 5 W: Mar 6 F: Mar 8 M: Mar 11 T: Mar 12 W: Mar 13 | D2L Quiz 4§3.5: Implicit Differentiation§3.6: Derivatives of Inverse FunctionsCATCH-UP ON DERIVATIVESExam II Sections 2.1, 2.6, 3.1-3.6SPRING BREAK NO CLASSSPRING BREAK NO CLASSSPRING BREAK NO CLASSSPRING BREAK NO CLASSNO CLASSSPRING BREAK NO CLASS | HW IV Read §3.6 WW 2.1, 2.5, 2.6, 3.1–3.4 |

| DATE | MATERIAL COVERED IN LECTURE | To do for next class |
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| | | Assignments due |
| M: Mar 18 | §3.7: Rates of Change in Use | |
| T: Mar 19 | §3.7 Continued | Read §4.1 |
| W: Mar 20 | §4.1: Extreme Values | Read §4.2 |
| F: Mar 22 | §4.2: Mean Value Theorem | <i>Read</i> §4.3 |
| | D2L Quiz 5 | |
| M: Mar 25 | $\S4.3$: The 1 st and 2 nd Derivative Tests | |
| T: Mar 26 | §4.3 Continued | |
| W: Mar 27 | §4.3 Continued | Read §4.4 |
| F: Mar 29 | §4.4: L-Hôpital's Rule | |
| | D2L Quiz 6 | HW V |
| M: Apr 1 | §4.4 Continued | Read §4.5 |
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| T: Apr 2 | §4.5: Newton's Method | |
| T: Apr 2 W: Apr 3 | §4.5: Newton's Method §4.5 Continued | Read §4.6 |
| T: Apr 2 W: Apr 3 F: Apr 5 | §4.5: Newton's Method §4.5 Continued §4.6: Optimization Problems | Read §4.6 |
| T: Apr 2 W: Apr 3 F: Apr 5 | §4.5: Newton's Method §4.5 Continued §4.6: Optimization Problems D2L Quiz 7 | Read §4.6 HW VI |
| T: Apr 2 W: Apr 3 F: Apr 5 M: Apr 8 | §4.5: Newton's Method §4.5 Continued §4.6: Optimization Problems D2L Quiz 7 §4.6 Continued | Read §4.6 HW VI |
| T: Apr 2 W: Apr 3 F: Apr 5 M: Apr 8 T: Apr 9 | §4.5: Newton's Method§4.5 Continued§4.6: Optimization ProblemsD2L Quiz 7§4.6 Continued§4.7: Antiderivatives | Read §4.6 HW VI |
| T: Apr 2 W: Apr 3 F: Apr 5 M: Apr 8 T: Apr 9 W: Apr 10 | §4.5: Newton's Method §4.5 Continued §4.6: Optimization Problems D2L Quiz 7 §4.6 Continued §4.7: Antiderivatives CATCH-UP ON APPLICATIONS | Read §4.6 HW VI WW 3.5–3.7, 4.1–4.6 |

| DATE | MATERIAL COVERED IN LECTURE | To do for next class |
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| | | Assignments due |
| M: Apr 15 | §5.1: Area, Distance, and | |
| - | Riemann Sums | |
| T: Apr 16 | §5.1 Continued | Read §5.2 |
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| W: Apr 17 | §5.2: The Definite Integral | Read §5.3 |
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| F: Apr 19 | §5.3: Fundamental Theorem of Calculus | |
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| M: Apr 22 | §5.3 Continued | Read §5.4 |
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| T: Apr 23 | §5.4: Indefinite Integrals | |
| 1 | | |
| W: Apr 24 | §5.4: Substitution Rule | |
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| F: Apr 26 | §5.4 Continued | |
| | D2L Quiz 9 | HW VII |
| M: Apr 29 | §5.4 Continued | Read §5.5 |
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| T: Apr 30 | §5.5: Definite Integrals & | |
| - | Substitution Rule | |
| W: May 1 | §5.5 Continued | |
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| F: May 3 | CATCH-UP ON INTEGRATION & REVIEW | HW VIII |
| | D2L Quiz 10 | WW 4.7, 5.1–5.5 |
| M: May 6 | MAT181-050 FINAL EXAM: 11 AM – 1 PM | Location TBD |
| F: May 10 | MAT181-070 FINAL EXAM: 2 PM – 4 PM | Location TBD |