Math 203: Differential and Integral Calculus
Syllabus
Section 1757

- **Instructor:** Dr. Shayea Aldossari.
- **Contact:** e-mail: shaaldossari@ksu.edu.sa.
- **Meeting Time:** Sun, Tu, and Th from 10:00am-10:50am, Room AA 142 building 4.
- **Office Hours:** Monday 10:00am-12:00pm, Wednesday 8:00am-10:00am or by appointment.
- **Texts:** Calculus by Swokowski, Olinick, Pence (Sixth Edition)
- **Coures Contents: Sections,Topics, Exercises**

  Chapter 8: Infinite Series

  8.1 Sequences:19, 24, 26, 27, 30, 38, 42.

  8.2 Convergence or Divergence Series: 2, 4, 5, 8, 9, 11, 13, 26, 27, 31, 32, 33, 35, 40, 43, 44, 45.

  8.3 Positive-term Series;2, 3, 4, 6, 9, 12, 14, 15, 18, 19, 22, 23, 26, 27, 31, 32, 33, 36, 38, 42.

  8.4 The Ratio and Root Tests:3, 4, 6, 7, 10, 12, 15, 16, 17, 20, 23, 25, 27, 30, 37, 38, 40

  8.5 Alternating Series and Absolute Convergence: 1, 4, 6, 9, 14, 16, 19, 22, 24, 25, 29, 32

  8.6 Power Series:5, 6, 11, 18, 21, 25, 29, 30, 33

  8.7 Power Series Representation of Functions:1, 2, 5, 6, 10, 15, 18, 19, 23, 27, 28, 31, 34

  8.8 Maclaurin and Taylor Series:
  7, 8, 10, 11, 13, 15, 16, 18, 19, 20, 21, 23, 25, 28, 30, 31, 33, 38, 40, 42.

  Chapter 13: Multiple Integrals

  13.1 Double Integrals:14, 15, 19, 20, 22, 23, 25, 27, 29, 31, 46, 47.

  13.2 Area and Volume:8, 9, 10, 12, 22, 24, 29, 31.

  13.3 Double Integrals in Polar Coordinates:8, 11, 12, 13, 15, 20, 21, 22, 23, 26, 27.

  13.4 Surface Area:1, 2, 6, 8, 11, 12

  13.5 Triple Integrals:2, 5, 6, 12, 13, 16, 22, 30, 31.

  13.6 Moments and Center of Mass:1, 4, 12, 20, 24, 29.

13.7 Cylindrical Coordinates:$2, 3, 4, 16, , 21, 31, 33, 35, 36, 38, 34$.

13.8 Spherical Coordinates:$2, 5, 6, 13, 16, 21, 28, 31, 37, 40$.

Chapter 14: Vector Calculus

14.1 Vector fields:$13, 14, 17, 20$.

14.2 Line Integrals:$5, 8, 14, 15, 16, 18, 20, 24$

14.3 Independence of Path:$4, 5, 6, 11, 14, 15, 18, 20, 21$

14.4 Green's Theorem:$3, 4, 5, 10, 11, 14, 15, 18, 20, 21$.

14.5 Surface Integrals:$2, 3, 11, 14, 16, 17$.

14.6 The Divergence Theorem:$1, 2, 8, 9, 10, 12$.

14.7 Stockes's Theorem:$1, 5, 7$.

- **Attendance Policy:** Students are expected to attend every class, to arrive on time, and to participate in all class activities. You are responsible for material covered if you are absent. If you miss 25% of the class meetings, your grade will be DN (Denied).

- **Exams and Grading Policy:**

  - First Midterm: 25 points.
  - Second Midterm: 25 points.
  - Final Exam: 40 points. In Class on Wednesday 25/5/1443 (29/12/2021).
  - 10 points for the TA.

  Final grade will be calculated in the following way: $100 - 95 =$ A+, $> 95 - 90 =$ A, $> 90 - 85 =$ B+, $> 85 - 80 =$ B, $> 80 - 75 =$ C+, $> 75 - 70 =$ C, $> 70 - 65 =$D+, $> 65 - 60 =$ D, and $> 60 =$F.