Calculus II, Spring 2024 (http://www.math.nthu.edu.tw/~wangwc/) Thomas' Calculus Early Transcendentals 13ed

Study guide for quiz 04

Quiz problems include both the lecture contents and homework problems.

- 1. Section 10.6: Study The statement and proof of the Alternating Series Test and the Alternating Series Estimation Theorem. Practice it with some examples.
- 2. Section 10.6: Memorize some examples of absolutely (conditionally) convergent series.
- 3. Section 10.6: Skip (ignore) the "Rearranging Series" part. It will not appear in any exams.
- 4. Section 10.7 (part I): Study the Convergence Theorem for Power Series. Review the meaning of "radius of convergence" for a power series (the statement of "Corollary to Theorem 18" on page 634). For example, what does it mean by "the radius for $\sum c_n(x-2)^n$ is 1"?

Study how to test a power series for convergence and how to find the radius on convergence.