Calculus 2 IBDPE Final Exam Info

Time and Location

Wednesday, June 24, 10:10-12:00 at D.A.E. 5825 (for ***Even*** student ID number) and D.A.E. 5834 (for ***Odd*** student IP number).

Ground Rules

- Closed book. No notes. No calculator. The only allowed items on your desk are pen/pencil, erasers/whiteout, and ruler. No food is allowed. Coffee or beverage is allowed, although discouraged.
- Please use the bathroom before the exam. If you absolutely have to go to bathroom during the exam, you need to go to the designated ones that we have inspected before the exam. You also need to verify to me that your pockets are empty before you go.
- No hat nor sunglass may be worn unless required by medical condition.
- ABSOLUTELY no electronic device may be turned on during the exam. Any voice from cellular phone is considered cheating.
- Makeup exam is only possible when a student is absent due to university official duties.
- Regrade: please see the syllabus for regrade policy.

Tools

Only writing tools are allowed during this exam.

Format

The exam will consist of two parts. The first part contains three problems on the materials covered after the second midterm, namely, sections 16.3~16.6, 17.2, 17.3. You have to do ALL three problems on this part. The second part contains seven problems selected from materials tested on the first two midterms. You only have to do five problems from them.

Topics to Cover

This exam in principle covers all materials covered throughout this semester. The explicit topics are topics listed in Exam 1 Info and Exam 2 Info sheets, plus

- Mean Value Theorem and Chain Rules: Be able to use mean value theorem to prove simple facts. Be able to compute derivatives of any variables with respect to any parameters.
- Gradients vs. Tangent Planes: Know how to construct tangent planes of a surface, given as level set or graph of a function.
- Extreme Values: Be able to locate critical points and determine their natures (local max/min or saddle). Be able to determine the extreme value of a function over a domain.
- Iterated Integrals: Be able to compute simple double integrals with difficulties comparable to the ones presented in class and practice problems.

Study Suggestions

- Get enough sleep the night before the exam.
- Practice homework problems THOROUGHLY and be able to appreciate the insight of the problems so that you can do those problems in any forms and with moderate variations. Exam problems are modelled on homework problems.
- This exam emphasizes on conceptual understanding rather than mechanical computations. If you are stuck in long computations, it is recommended to rethink your process and see if you are forgetting some part of the concepts.

Grade Review

Your final average will be submitted on July 3 and you may view your graded final exam as well as the score records of all your graded work on or before July 2. Please email me to arrange for your visit before coming to my office. I will *ONLY* discuss grade related information with you *IN PERSON*.