

COURSE DESCRIPTION
CALCULUS OF SEVERAL VARIABLES
MA 642-OQ
SUMMER 2021

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF ALABAMA AT BIRMINGHAM

Course Instructor: Rudi Weikard
Office: UH 4032
Zoom: <https://uab.zoom.us/my/rudi.weikard>
E-mail: weikard@uab.edu
Office Hours: Drop in anytime via Zoom or e-mail for an appointment

Meeting times: MWF 11:20 am – 12:40 pm
Meeting location: UH 4002
Prerequisite: Grade of B or better in MA 541 or equivalent
Credits: 3 semester hours
Textbook: W. Rudin, Principles of Mathematical Analysis
Canvas: <https://www.uab.edu/elearning/canvas/>
UAB United: <https://www.uab.edu/uabunited/students>

Important dates:

First day of classes: June 7
Last day to Drop/Add: June 14
Independence Day Holiday: July 5
Last day of classes: August 6
Final Exam Day: August 9
Grades available online: August 18

Course content:

- Limits and continuity
 - Differentiation
 - The multi-dimensional Riemann integral
 - Integration of differential forms
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Assessment procedures: There are no quizzes or tests. Neither is there a Final Exam. Points are earned through presentations of topics from the lecture notes according to the following rules:

- (1) The correct presentation of a topic will earn 10 points. It is advised to write out the proof on paper beforehand. You may use the textbook freely

Date: May 24, 2021.

when devising your proofs but you should first try to think of a solution yourself.

- (2) The audience (including the instructor) may challenge a statement made in the course of a proof at any point.
- (3) If the presenter is able to defend the challenged statement, he or she proceeds; if not, the presenter must sit down earning no points for this problem and losing the right to present again that day. The challenger may then present his or her solution to the topic at hand.
- (4) The successor of a presenter will be chosen as the student with the smallest number of points among the volunteers taking into account the modification by rules (3) and (5). A random choice is made, if necessary.
- (5) You may volunteer for a particular topic by an e-mail to me. This (in the order received) establishes priority among volunteers with the same number of points.
- (6) You must give credit where credit is due, i.e., during your presentation you must declare the points at which you had help and by whom.
- (7) It is also possible to report joint work with one or two collaborators. In such a case 4 points will be earned for the presentation while the other 6 points are evenly distributed among the collaborative.
- (8) Class attendance and participation is required. Absences from class are recorded. After 5 absences from class 10 points will be subtracted from your score and the count of absences is set again to zero.

Letter grades: If we cover all material of the lecture notes, the student with the highest score S will receive an A. An A, B, or C is earned by anyone who has at least 90%, 70%, or 50% of S , respectively. Should we fall short of covering all material the highest score will earn a B.

COVID-19

UAB Disability Support Services (DSS) has established a process for UAB students to request temporary adjustments based on the impact of COVID-19. The process is similar to the traditional DSS registration procedures for accommodations based on disability. However, these requests will be referred to as "COVID-19 Related Temporary Adjustments". On the DSS website <http://www.uab.edu/dss>, there is a section (next to the traditional DSS application process) titled "Request COVID-19 Temporary Adjustments" where students can read the process and click to complete an application.

Disability Support Services

UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact me to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted Disability Support Services, please call 934-4205 or visit <http://www.uab.edu/dss>.