# Birzeit University

# Physics Department

# Phys 330 METHODS OF MATHEMATICAL PHYSICS

Instructor: Dr. Hazem Abusara	Session: Fall 2020
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Office: Office: Sci258	
Office Hours:	TR:10:00-12:50
Lecture Times: MW: 08:30-09:45	Room: Sci115

# Textbooks

• Boas, Mary L., Mathematical Methods in the Physical Sciences, 3<sup>rd</sup> edition (required)

#### Lecture Schedule

- Complex numbers
- Linear Algebra
- Vector Analysis
- Special Functions
- Partial Differential equations
- Legender, Bessel, Hermite and Laguerre functions
- Functions of a complex variables

#### Evaluation

Midterm-Exam	20%
Homeworks	30%
Final exam	50%

#### Assignment Details

Homework will be assigned in the end of each lecture, and are due one week later. You must turn in your homework on the due date; late homeworks will be given a zero grade, otherwise your final grade on the assignment will be reduced by a factor of  $e^{-t/24}$ , t is the number of elapsed hours after the due time of the assignment. Homeworks are crucial to understanding the material deeply. After attempting each problem by yourself, you are encouraged to discuss the problems with me and with each other. However, you must write-up your solutions by yourself. Your solutions should not be transcriptions or reproductions of someone else's work. Any copied homeworks will get a grade of zero, and will be considered as plagiarism.