Syllabus
Mathematical Physics 2

PHYS 301-Spring 2021

Textbook: Fundamentals of Complex Analysis with Applications to Engineering, Science, and Mathematics (3rd Edition)
By: Edward Saff and Arthur D. Snider

Reference: Complex variables and Applications (Seventh Edition)

By: James Ward Brown and Ruel V. Churchill

Topics to be Covered	Nb of Weeks
Complex Numbers, Complex Analytic Functions	3
Complex Integrals	3
Power Series, Taylor Series, Laurent Series	3
Integration by the Methods of Residues	3

Chapters of the course (From the textbook):

Chapter 1. Complex Numbers
Chapter 2. Analytic Functions
Chapter 3. Elementary Functions
Chapter 4. Complex Integration
Chapter 5. Series Representations for Analytic Functions
Chapter 6. Residue Theory

Course Learning Outcomes (CLO)

The student should be able to:

1. Manipulate complex numbers
2. Derivate and Integrate complex functions
3. Develop in Taylor and Laurent series any complex function
4. Integrate complex functions using method of Residues

Course Evaluation

Exam	*Marks*
Midterm Exam	**20**
Tutorial	**20**
Homework	**20**
Final	**40**
TOTAL	**100**

Absence Policy:

I. **Attendance percentage:**
- **Student should attend the course lectures during all the weeks of the semester.**
- **Students with absence hours more than 25% of the total course hours will be banned from the Final Exam.**

II. **Absence from Examinations:**
- **If you are unable to attend an examination (first or second midterm) owing to illness or other unavoidable circumstances, you should provide an acceptable evidence of 'good cause' for such absence to the competent commission. If the absence is regarded as authorized, student will grant a Makeup Exam only once.**
- **All Makeup Exams will be scheduled at the same time one week before the Final Exam.**
- **No other Makeup Exam will be done in the same semester.**
  If you miss the Makeup Exam, you will have a mark of zero.

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