Nuclear Physics (1)

481 Physics

Text book:

Fundamentals of Nuclear Physics (Arabic)

By: Barakat

Chapter	Title	Hours
1	**Properties of the nucleus: Isotopes, Mass defect, angular momentum, nuclear electromagnetic moments, nuclear forces**	11
2	**Radioactivity: Decay law, natural radioactivity, basic alpha decay process, Beta decays, Gamma transition and Internal Conversion**	11
3	**Nuclear reactions: Q-value of the nuclear reactions, threshold energy (E_{th})**	9
4	**Interaction of Gamma radiation with matter (photoelectric, Compton and pair production).**	9
5	**Binding energy and the liquid drop model**	5

Course Description: http://faculty.ksu.edu.sa/14297/default.aspx

Marks distribution:

1) **Two midterm exams each 20 marks----------= 40 marks**
2) **Class activities----------= 10 marks**
3) **Final exam----------= 50 marks**

Total----------= 100 marks

Lecturers; Dr. Safar Al-Ghamdi

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Exam Dates: Mid. Term. (1): 5/1/1432, Saturday: 05:00-07:00 pm
Mid. Term. (2): 11/2/1432, Saturday: 05:00-07:00 pm
Final: