Course:

[PHYS 103: Classical Mechanics](http://fac.ksu.edu.sa/hralqahtani/course/60203)

**Course outline for 103 Physics**
**(Mechanics)**

**Text book:**
                 **Physics for Scientists and Engineers**
                **6th Edition**
**Raymond A.** **Serway**

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| --- | --- | --- | --- | --- |
| **Chapter**  | **Title** | **Section** | **Hours** | **Suggested problems** |
| **1** | **Physics and measurement** | **1.1, 1.4, 1.5** | **2** | **13,15,21,25,31** |
| **2** | **Motion in One Dimension** | **2.1, 2.2, 2.3, 2.5, 2.6** | **4** | **4,5,11,15,16,20,21,22,23,25,27,28,29,32,33,40,42,43,46,48,51,52** |
| **3** | **Vectors** | **3.1--to--3.4** | **4** | **1,4,19,21,27,30,31,33,39,49,50** |
| **4** | **Motion in Two Dimensions** | **4.1--to--4.5** | **4** | **1,3,5,6,8,14,15,17,19,20,22,23,25,29** |
| **5** | **The Laws of Motion** | **5.1--to--5.8** | **6** | **3,7,11,16,18,24,25,26,28,30,31,37,41,44,45,46,68** |
| **6** | **Circular Motion and Other Applications of  Newton's Laws** | **6.1** | **2** | **1,2,5,7,59** |
| **7** | **Energy and Energy Transfer** | **7.2--to--7.8** | **4** | **1,4,7,13,14,15, 16,19,21,24,25,26,28,31,32,33,35,37,40** |
| **8** | **Potential Energy** | **8.1--to--8.5** | **4** | **2,5,6,11,13,17, 31,33,36,38,42,55,57,59,60** |
| **9** | **Linear Momentum and Collisions** | **9.1--to--9.4** | **5** | **1,2,4,5,7,8,9,10,13,15,16,17,18,21,25,27,32,33,35** |
| **10** | **Rotation of a Rigid Object About a Fixed Axis** | **10.1--to--10.8** | **6** | **1,3,5,6,8,12,13,16,17,18,20,21,31,35,37,46,70,71** |

Marks distribution:

1. **Two midterm exams each 15 marks------------- = 30 marks**
2. **Practical work (Lab.)------------------------------- = 30 marks**
3. **Final exam-------------------------------------------- = 40 marks**

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

Chapters Distribution for the Exams:

Mid-1 (to be announced ---- from 7 to 8:30 pm): CHAP: 1- 5

Mid-2 (to be announced --- from 7 to 8:30 pm): CHAP: 6-9

Final (Tuesday 11/12/2018 (4-04-1440) from 1 to 4 pm): All the 10 CHAPTERS

Absence Policy:

1. Attendance percentage:
* Student should attend the course lectures during the 15 weeks of the semester.
* Students with absence hours more than 25% of the total course hours will be banned from the Final Exam.
1. 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.

**Lecturer: Dr. Abubaker Ahmed Siddig**

**Office: 1A 51**

**Office Tel. No.: ~~4675647~~**

**Email: asiddig@ksu.edu.sa**