# Fall 2017, Physics 303 - Classical Mechanics II Syllabus

### 1 Instructor: Eugeniy E. Mikhailov.

- Office: Small Hall 253
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#### 1.1 Office Hours:.

Office hours are 12:30pm-2pm on Tuesday, 1:30-2:30pm on Wednesday, or schedule an appointment.

# 2 Required Textbook.

"Classical Mechanics" by John R. Taylor (University Science Books). Available at WM book store and amazon

- ISBN-13: 978-1891389221
- ISBN-10: 189138922X

There is a copy of the book reserved at the library.

#### 3 Topics to be covered.

- two-body central-force (review) Chapter 8
- collision theory, i.e. scattering Chapter 14
- noninertial frames Chapter 9
- rigid body rotation Chapter 10
- inertia tensor Chapter 10
- continuum mechanics and wave motion Chapter 16
- special relativity Chapter 15
- nonlinear dynamics and chaos Chapter 12

# 4 Evaluations.

Your final grade for the course will be determined from the following grading weight distribution:

- Homeworks: 45%
- Midterm exams: 30% (there will be 2 or 3 of them)
- Final exam: 25%

Occasionally I will make mistakes: typos, etc. If you report them or prove me wrong, you will get an extra bonus.

# 5 Grading.

Grade	Score $\%$	Grade	Score $\%$	Grade	Score $\%$
		А	94-100	A-	90-94
B+	87-90	В	84-87	B-	80-84
C+	77-80	$\mathbf{C}$	74-77	C-	70-74
D+	67-70	D	64-67	D-	60-64
F	<60				

### 6 Homework report key parts.

• due date: corresponding Thursday at the beginning of the class.

#### 6.1 Late submission penalties.

For each consequent day after due date there will be a penalty (5% out of maximum possible score). Even if a submission happens 1 minute after due date, it holds 1 day penalty. There is a way to get submission extensions if you ask in **advance**.

#### 6.2 Illness.

Please notify the instructor if you are ill, so that arrangements can be made to help you with missed material or delayed submissions.

#### 7 Important dates.

• Final on December 18th at 2pm–5pm