

科目名	Course Title
解析力学2(Analytical Mechanics II)	
学科・専攻	Department/Program
G30 Physics	
受講年次	Grade
2nd	
授業形態	Class style
必修・選択の別	Compulsory or Elective
講義	* See "Remarks"
時間割コード	Registration code
0680040	
開講期・曜日・時限	Semester, Day & Period
春学期 木 : 1	
単位数	Credit
2	
科目区分	Course type
Basic Specialized Course	
担当教員	Instructor
重森 正樹(SHIGEMORI Masaki)	
所属研究室	Laboratory
連絡先	Contact
居室	Room

講義の目的とねらい	Course purpose
<p>This course is the continuation of Analytical Mechanics I. Based on the framework developed there, some explicit physical systems and their physics will be studied, such as motion in non-inertial frames, rigid bodies, and small oscillations. Toward the end of the course, special relativity will be introduced and relevant notions will be developed.</p>	
履修要件	Prerequisite
Analytical Mechanics I, Mathematical Physics I & II	
履修取り下げについて	Course withdrawal
<p>&lt;可否&gt; Possible &lt;条件&gt; You may withdraw from the course following the standard procedure of the School of Science.</p>	
成績評価	Grading
Attendance: 5%, homework: 25%, exams (midterm and final): 30%+30%=70%	
不可 ( F ) と欠席の基準	Criteria for "Absent" & "Fail" grades
<p>The " Absent " grade is reserved for students who withdraw by the deadline. After that day, a letter grade will be given based on the assessment during the semester.</p>	
関連する科目	Related courses
Physics Tutorial IIc (the tutorial for AM II)	
教室	Class room

Check the Course Timetable.  
ES035

授業内容 Content

1. Motion in a Non-Inertial Frame
2. Rigid Bodies
3. Small Oscillations
4. Special Relativity

教科書 Textbook

H. Goldstein, C. Poole and J. Safko, "Classical Mechanics", Pearson; 3rd edition (2013), ISBN-10: 1292026553, ISBN-13: 978-1292026558

参考書 Recommended reading

L. D. Landau and E. M. Lifschitz, "Mechanics: Volume 1 (Course of Theoretical Physics)", Butterworth-Heinemann; 3rd edition (1976), ISBN-10: 0750628960, ISBN-13: 978-0750628969.  
L. N. Hand and J. D. Finch, "Analytical Mechanics", Cambridge University Press (1999), ISBN-10: 0521575729, ISBN-13: 978-0521575720.

連絡方法 Contact method

その他 Remarks

\*See Course List and Graduation Requirements for your program for your enrollment year.  
\*See "Course List and Graduation Requirements" for your program for your enrollment year.  
You are required to register for Physics Tutorial IIc (the tutorial for AM II) concurrently, unless you have passed the course.