


Course 講義名	Analytical Mechanics I
Instructor 教員名	Masaki Shigemori
Email	masaki.shigemori@nagoya-u.jp
Code 講義コード	0680030
Day and Period 曜日と時間	Wed 2 (10:30-12:00)
Semester 開講期間	Fall Semester, full
On-Off line 対面/オンライン	Both (students not in Nagoya can choose online)
Participation 指定時間の出席	Yes, but also available online as a recording.
Online tool オンラインツール	NUCT Zoom
Lecture room 講義室	E&S Building ES034
English level 講義の英語レベル	Intermediate
Content level 講義内容の難易度	Intermediate
Course style 講義形式	Regular Lecture Recommend active participation in class
Evaluation methods 主な評価方法	Final exam Mid-term exam Homeworks Attendance
Audit 聴講の可否	聴講可
Message from the instructor 教員からのメッセージ	 <p><i>This is the first of two courses in analytical mechanics. Analytical mechanics abstracts from Newtonian mechanics and generalizes it to a versatile framework that can be applied to various areas of physics, such as quantum mechanics, statistical mechanics, and relativity. After a survey of elementary principles, we discuss the core concepts of Lagrangian and Hamiltonian mechanics, with special emphasis on symmetry principles, followed by some explicit examples.</i></p>