科目名 **Course Title** 物理化学2(Physical Chemistry II) 学科・専攻 受講年次 Department/Program Grade G30 Chemistry 2nd 授業形態 **Class style** 必修・選択の別 **Compulsory or Elective** \* See "Remarks" 講義 時間割コード **Registration code** 開講期・曜日・時限 Semester, Day & Period 春学期木:2 0681090 単位数 Credit 科目区分 Course type 2 **Basic Specialized Course** 担当教員 Instructor BUTKO Peter(BUTKO Peter) 所属研究室 Laboratory \_\_\_\_\_ 連絡先 Contact 居室 Room

# 講義の目的とねらい Course purpose

The purpose of this course is to learn what physical chemistry is all about and to grasp important principles and facts about physical chemistry. The focus is on statistical thermodynamics and its applications. The course finishes with a study of kinetics and dynamics of chemical reactions.

## 履修要件 Prerequisite

Physical Chemistry I

履修取り下げについて Course withdrawal

<可否> Possible

<条件>

This course uses the course withdrawal system: Need to submit a Course Withdrawal Request Form by the 6th lecture period when students have no intention of finishing a course.

# 成績評価 Grading

Two exams: 100 points each, final exam (comprehensive): 200, homework: 50. TOTAL: 450. Grade "S": 100-90% (405 or more points), "A": 89-80% (404 - 360 pts), "B": 79-70% (359 - 315 pts), "C": 69-60% (314 - 270 pts), "F": 59-0% (fewer than 270 pts).

# 不可(F)と欠席の基準 Criteria for "Absent" & "Fail" grades

The "Absent" grade is reserved for students that withdraw by the 6th lecture period. After that day, a letter grade will be awarded based on grades earned from all assignments during the semester.

関連する科目 Related courses

教室 Class room

Check the Course Timetable. A-407

#### 授業内容 Content

Stat. Thermodynamics 1 (Ch. 13)
Stat. Thermodynamics 2 (Ch. 13)
Molecular Interactions 1 (Ch. 14)
Molecular Interactions 2 (Ch. 14)
EXAM 1 (Chs. 13 – 14)
Solids (Ch. 15)
Molecules in Motion 1 (Ch. 16)
Molecules in Motion 2 (Ch. 16)
Chemical Kinetics 1 (Ch. 17)
Chemical Kinetics 2 (Ch. 17)
EXAM 2 (Chs. 16 - 17)
Reaction Dynamics 1 (Ch. 18)
Reaction Dynamics 2 (Ch. 18)
Pre-Final Review
FINAL EXAM (Chs. 13 – 18)

## 教科書 Textbook

P. Atkins, J. de Paula & J. Keeler: Atkins ' Physical Chemistry, 11th Ed., Oxford University Press, 2018

# 参考書 Recommended reading

## 連絡方法 Contact method

pbutko@chem.nagoya-u.ac.jp

## その他 Remarks

\*See Course List and Graduation Requirements for your program for your enrollment year.

It is essential to sit in each exam during the scheduled class time. There will be NO make-up exam. In the event of a missed exam due to a serious illness, accident or family emergency, compelling written documentation of the reason for the absence will be required. If the reason is accepted, the final grade will be calculated from the appropriately weighted average from the rest of the exams. If the reason will be deemed insufficient, the absence will be unexcused, and zero points will be awarded for the missed exam. WARNING: Missing more than one exam (it does not matter whether excused or not) means automatically failing the course.