

科目名	Course Title
分析化学(Analytical Chemistry)	
学科・専攻	Department/Program
G30 Chemistry	
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
0681100	
開講期・曜日・時限	Semester, Day & Period
Fall semester Tue : 1	
単位数	Credit
2	
科目区分	Course type
Basic Specialized Courses	
担当教員	Instructor
SAMJESKE Gabor arwed(SAMJESKE Gabor arwed)	
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 course will introduce the fundamentals of analytical chemistry and mainly focuses on classical but still widely used wet chemical methods, combined with an overview of the instrumental techniques used in contemporary chemical analysis.	
履修要件	Prerequisite
Fundamentals in Chemistry I, II. ILAS course Laboratory in Chemistry is mandatory!	
履修取り下げの方法について	How to Apply for Course Withdrawal
<「履修取り下げ届」提出の要・不要 Necessity/Unnecessity to submit "Course Withdrawal Request Form"> Necessary <条件等 Conditions> Due the special circumstances in AY2020 related to the COVID-19 pandemic, course withdrawal will be allowed until the final exam. Depending on the situation either in written paper form or by email.	
成績評価	Grading

Grading will follow the rules for G30 students who have entered NU before AY2020 (5 letter system):

TOTAL 100% = 100 pts

Grades: "S" = 100 - 90% (> 90 pts), "A" = 89 - 80% (90 - 80 pts), "B" = 79 - 70% (79 - 70 pts), "C" = 69 - 60% (69 - 60 pts), "F" = 59 - 0% (< 60 pts)

Face to face classes: Activity, homework: 10%, intermediate exam: 30%, final exam (comprehensive): 60%

On-line classes: Reports: 65%, final exam (on-line): 35% The final exam is mandatory!

Grades are final and calculated on the basis of the performances during class (reports in case of on-line classes) and in the two exams (one final exam in case of on-line classes) only. There will be no possibility to improve a grade after the final exam. Students who miss the final exam due to a (documented) illness, injury or other unavoidable reasons can ask the instructor.

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

The course will be graded "F" (failed) if less than 60% of the points were obtained. The course will be graded as "absent" as stated in "course withdrawal"

関連する科目 Related courses

Inorganic Chemistry I + II, Chemistry of Inorganic Materials I, Laboratory in Chemistry

教室 Class room

Check the Course Timetable.

到達目標 Goal

After successfully passing the course, the student should be able to understand the purpose of analytical chemistry, its methods and results that can be achieved. The course aims in teaching a consolidated knowledge of the principles of analytical chemistry based on which chemical sample analysis in the laboratory can be done.

授業内容 Content

Analytical Chemistry will cover the following topics

- Acid - base equilibria
- Precipitation/gravimetry
- Redox equilibria
- Titration
- Spectrochemical methods
- Chromatography

教科書 Textbook

Gary D. Christian; "ANALYTICAL CHEMISTRY, 7TH EDITION"; 2013; Publication Hoboken, N.J.: John Wiley & Sons

参考書 Recommended reading

Jack Barrett, "Inorganic Chemistry in Aqueous Solutions", RSC Publishing, 2003, ISBN 0-85404-471-X

連絡方法 Contact method

Either after the classes or during the office hours/by email (to be announced)

その他 Remarks

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

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