授業科目名(英文名) /Course title	水圏化学ゼミナール	/Semir	nar on Hydrosphere Geochemis	stry I	
担当教員(所属) / Instructor	張 勁(理学部生物圏環境科学科)				
授業科目区分 / Category	専門教育科目 グローバルSDGs専門科目				
地域課題解決型人材育成プログラ ム科目 / COC+Course	-		授業種別 / Type of class	演習科目	
開講学期曜限 / Per i od	2022年度 / Academic Year 第3ターム / Term 3 火/Tue 5		対象所属 / Eligible Faculty	グローバルS School of S Graduate Pr	会創成学環(修士課程) EDGsプログラム/Graduate Bustainability Studies Logram in Global ity Science
時間割コード / Registration Code		_	対象学年/Eligible grade	1年 ,2年	単位数 / Credits 1単位
ナンバリングコード / Numbering Co 連絡生(四窓会、電話来品、電スメ		$\vdash$			
連絡先(研究室、電話番号、電子メ オフィスアワー(自由質問時間)/	•	-			
オフィスアワー(自由負向時间)/ Moodleコース統合時間割コード	Office flours				
Moodle course join Registration	on Code				
Moodleコース登録教員名 /Moodle course registered Instr	ructor				
MoodleコースURL /Moodle course URL	https://Ims.u-	-toyama	a.ac.jp/course/view.php?idnu	umber=2022_D	)43368
各種教育プログラム1/Various Educational programs1					
各種教育プログラム2/Various Educational programs2					
各種教育プログラム3/Various Educational programs3					
各種教育プログラム4/Various Educational programs4					
各種教育プログラム5/Various Educational programs5					
リアルタイム・アドバイス / Real - t	time advice 更新日				
授業のねらいとカリキュラム上の位 /Course Objectives	Z置付け(一般学修目標)	)	教育目標 /Educational Goals		
In this course, students will le papers related to the SDGs in th to use standard expressions fred	he field of chemical o	oceanog	graphy. Students will learn	how to write	e scientific papers, how

through reading scientific papers in English.

## 達成目標/Course Goals

This course aims to enable students to

- (1) Set a topic and find the latest papers on the topic through various search techniques.
- (2) Explain a paper's research background, methods, results, etc.
- (3) Understand the style and structure of scientific papers.
- (4) Become familiar with standard expressions in scientific English.

# 授業計画(授業の形式、スケジュール等)/Class schedule

Session 1: Guidance, identification of issues in the field of hydrosphere chemistry, and search for articles

Session 2: Reading of academic papers related to issues in the field of hydrosphere chemistry 1-1 (on "research background")

Session 3: Reading of academic papers related to issues in the field of hydrosphere chemistry 1-2 (on "research methods")

Session 4: Reading of academic papers related to issues in the field of hydrosphere chemistry 1-3 (on "Results and

Session 5: Reading of academic papers related to issues in the field of hydrosphere chemistry 2-1 (on "research background")

Session 6: Reading of academic papers related to issues in the field of hydrosphere chemistry 2-2 (on "research methods")

Session 7: Reading of academic papers related to issues in the field of hydrosphere chemistry 2-3 (on "Results and discussion")

Session 8: Summary

## 授業時間外学修(事前・事後学修)/Independent Study Outside of Class

Pre-class study: Preparation for class based on the papers found through searching (more than 1 hour)

Post-class study: Summarizing the contents of the class (more than 1 hour)

キーワード / Keywords	
	The course schedule will be set after consultation with the supervisor in charge. Students are expected to prepare supplementary materials in both Japanese and English.
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#### 教科書 / Required Text

### 参考書/Required Materials

教科書・参考書に関するその他通信欄	Use electronic journals related to the assignment.
成績評価の方法 / Evaluation	Students will be graded on their participation in the course (20%), the content of their assigned report (30%), and the content of their presentation (50%).
関連科目/Related course	Chemical Oceanography
リンク先URL /URL of syllabus or other information	https://evaweb.u-toyama.ac.jp/html/556_ja.html (https://researchmap.jp/read0083133)
備考 / Notes	

#### 授業追加情報 / Course add information

_授業追加情報/Course add information				
使用言語 / Language	Japanese and English			
アクティブ・ラーニングの実施 / Active learning	実施あり			
アクティブラーニングの実施内容	We will foster scientific and logical thinking and information editing skills			
/Contents of Active learning	through active discussions in an interactive manner.			
実務経験教員科目/Work Experience				
teacher's subjects				
データサイエンス科目 / Data Science				
subjects				
他学部・他研究科等学生の履修可否 /	Not available			