基本情報	
時間割コード/Course Code	
開講区分(開講学期)/Semester	Fall and Winter Term
曜日・時間/Day and Period	Tue5
開講科目名/Course Name (Japanese)	エレクトロニクスへの招待
開講科目名(英) / Course Name	Invitation to Electronics
教室/Room	#CALC!
定員/Capacity	
ナンバリング/Course Numbering Code	#CALC!
必修·選択/Required/Optional	
授業形態/Type of Class	講義科目
単位数/Credits	2
年次/Student Year	
分野/Field	
担当教員/Instructor	WAKAYA Fujio
メディア授業科目/Course of Media Class	

詳細情報	
授業サブタイトル/Course Subtitle	
開講言語/Language of the Course	English
学習方法/Learning Method	聴講・視聴
授業の目的と概要/Course Objective	Electronics appears to be quite a popular technology in everyday life; getting up with an alarm clock, watching the morning news on TV of internet,
履修条件・受講条件/Requirement / Prerequisite	
出欠席及び受講に関するルール/Attendance and	
Student Conduct Policy	
教科書・指定教材/Textbooks	
参考図書・参考教材/Reference	
成績評価に関する補足情報/Additional Information	
on Grading	
合理的配慮/Reasonable Accommodation	#REF!
特記事項/Special Note	
オフィスアワー/Office Hour	
実務経験のある教員による授業科目/Course	
conducted by instructors with practical experience	

成績評価詳細情報	
学習目標(1) / Learning Goal(1)	To deepen the knowledge on various subjects related to electronics
学習目標(2) / Learning Goal(2)	To write a report on a specific topic related to electronics
学習目標(3) / Learning Goal(3)	
学習目標(4) / Learning Goal(4)	
学習目標(5) / Learning Goal(5)	

	評価方法				
学習目標/Learning Goal	学習への参加度	レポート・論文			
学習目標(1) / Learning Goal(1)	0	0			
学習目標(2) / Learning Goal(2)		0			
学習目標(3) / Learning Goal(3)					
学習目標(4) / Learning Goal(4)					
学習目標(5) / Learning Goal(5)					
評価割合(%)/Grade Breakdown	50%	50%	%	%	%

授業計画			
回/Time	題目/Title	内容/Content	授業時間外学習/ Independent Study Outside of Class
第1回	Guidance, introduction of this lecture	Guidance of the whole lecture by Prof. Wakaya.	
第2回	Introduction to vacuum nanoelectronics	Lecture by Prof. Wakaya on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第3回	Introduction to semiconductor	Lecture by Prof. Sakai on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第4回	Electron and hole	Lecture by Prof. Hattori on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第5回	Semiconductor spintronics	Lecture by Prof. Hamaya on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第6回	Spintronic materials and devices	Lecture by Prof. Yamada on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第7回	Atomic scale analysis towards nano materials design	Lecture by Prof. Tohei on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第8回	Photonic materials and devices	Lecture by Prof. Fujita on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第9回	Metamaterials	Lecture by Prof. Sanada on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第10回	Metamaterials and topology	Lecture by Prof. Nakata on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第11回	Thermoelectronics	Lecture by Prof. Nakamura on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第12回	Introduction to quantum computing	Lecture by Prof. Fujii on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第13回	Intorduction to Microscopy	Lecture by Prof. Abe on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.
第14回	lon trapping and its applications	Lecture by Prof. Tanaka on the subject specified in the 'Title' cell.	Report writing on the subject specified in the lecture.

第15回	Magnetic resonance and its applications	Isubject specified in the 'Title'	Report writing on the subject specified in the lecture.
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授業担当教員					
教員氏名/Instructor Name	ふりがな/Name (hiragana)	所属・職名・講座名/Affiliation, Title, Course	居室/Office	内線/Extension	e-mail/E-mail
WAKAYA Fujio	わかやふじお	Eng. Sci., A. Prof., Electronics	E112 of Eng. Sci. building	6670	wakaya.f.es@osaka-u.ac.jp
SAKAI Akira	さかいあきら	Eng. Sci., Prof., Electronics			
HATTORI Kiminori	はっとりきみのり	Eng. Sci., A. Prof., Electronics			
HAMAYA Kohei	はまやこうへい	Eng. Sci., Prof., Electronics			
YAMADA Shinya	やまだしんや	Eng. Sci., A. Prof., Electronics			
TOHEI Tetsuya	とうへいてつや	Eng. Sci., A. Prof., Electronics			
FUJITA Masayuki	ふじたまさゆき	Eng. Sci., A. Prof., Electronics			
SANADA Atsushi	さなだあつし	Eng. Sci., Prof., Electronics			
NAKATA Yosuke	なかたようすけ	Eng. Sci., A. Prof., Electronics			
NAKAMURA Yoshiaki	なかむらよしあき	Eng. Sci., Prof., Electronics			
FUJII Keisuke	ふじいけいすけ	Eng. Sci., Prof., Electronics			
ABE Masayuki	あべまさゆき	Eng. Sci., Prof., Electronics			
TANAKA Utako	たなかうたこ	Eng. Sci., A. Prof., Electronics			
AKABA Hideo	あかばひでお	Eng. Sci., A. Prof., Electronics			