

Syllabus

科目名[英文名]	固体物理学a[Solid State Physics a]		
担当教員[ローマ字表記]	新井 豊子[ARAI, Toyoko], 金子 浩[KANEKO, Hiroshi], 吉田 靖雄[YOSHIDA, Yasuo]		
科目ナンバー	PHYS5215A	科目ナンバリングとは	
時間割番号	01244	科目区分	-----
講義形態	-----	開講学域等	自然科学研究科(博士前期課程)
適正人数	-----	開講学期	Q3
曜日・時限	火4	単位数	1単位
対象学生	-----		
キーワード	face-to-face class type and on-demand class type (combination) Solid State Physics		
講義室情報	自然科学5号館A 会議室		
開放科目	-----		
備考	-----		

授業の主題

Understanding the basic of Solid State Physics

授業目標

I explain the basic phenomenon that is important to understand a solid property at first and then move to the higher level.

学生の学修目標

Understanding the basic of Solid State Physics step by step.

授業概要

learning the basics of solid-state physics and progressive content.

- ・surface structure
- ・Diffraction from the surface structure^{1,2}
- ・surface reconstruction (metal)
- ・surface reconstruction (semiconductor)
- ・superconduction phenomenon
- ・Cooper pair and BCS theory
- ・Quantization of the magnetic flux

Students are requested to give home learning for time corresponds to 90 min × 8 times to review the lecture and reference materials, and to make reports.

評価方法と割合

評価方法

Report
Attendance and presentation

評価の割合

Attendance to at least two-thirds of classes is required.
Report 80
Attendance and presentation 20

授業時間外の学修に関する指示

復習に関する指示

Students are required to do homework for review.

教科書・参考書

特になし

オフィスアワー等(学生からの質問への対応方法等)

Question at the lecture is strongly recommended. Rooms of the lectures are as follows:

Arai, Room 425, Building No. 5
Kaneko, Room 127, Building No. 5
Yoshida, Room 437, Building No. 5

履修条件

特になし

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