Elective Course Description (1. Fall Semester)

Subject (English)	Solid State Spectroscopy		Semester	Fall	Day/Slot	
科目名 (日本語)	固体分光学		Semester	raii	Day/Siot	
Course Code		Course Numbering	SPH-PHY8	17E	Period	Oct Feb.
Instructor	Go Yusa				Campus	
(Post)	(Assoc.Prof.)			Building		
Faculty	Faculty of Science		Credits	2	Class Room	

Class subject Solid State Spectroscopy

Object and summary of class

Solid State Spectroscopy

Keywords Spectroscopy, optics, solid state physics

Goal of study

The goal of this program is to familiarize students with the various methods of optical spectroscopy of solids and physical concepts developed through theories and experiments.

Contents and progress schedule of class

The topics below will be discussed in the program.

Interaction between matter and radiation

Electromagnetic response and optical constants

Optical response of semiconductors, insulators and metals

Excitons

Lattice vibrations

Conventional spectroscopy methods

Laser and laser spectroscopy methods

Preparation		
Record and evaluation method		
Textbook and references		
Self study		
In addition		