

Course number	Name of the Course			Japanese Name	
HE40193	Practice of Medical Engineering			医用工学実習	
Class	Unit	Module	Week	Time	Room
1st year	1 unit	Autumn B&C	Intensive	4-5th hour	Joint Use Build B105
Instructors (Office・Tel・email・Office hour)					
Hirotooshi Miyoshi (Grad Sch Med Sci Build 309, 3253, hmiyoshi@md.tsukuba.ac.jp) Keiko Ookawa (4A124)					
Objectives					
Characteristics of basic electric circuits used for the measurements of biological signals are understood by constructing these circuits and by measuring the characteristics. The methods to analyze and present experimental data as well as principles of medical devices are learned by preparing reports.					
Language: <input checked="" type="checkbox"/> / <input type="checkbox"/> Japanese、 <input type="checkbox"/> English、 <input checked="" type="checkbox"/> Bilingual					
	Date	Name of instructor	Lecture outline		
1	1/7 (Mon)	Miyoshi & Ookawa	Orientation		
2	1/8 (Tue)		Operational Amplifier		
3	1/9 (Wed)		Differential Amplifier		
4	1/10 (Thu)		Rectifier Circuit		
5	1/15 (Tue)		Filter Circuit		
6	1/16 (Wed)		Frequency Characteristics of Electrocardiograph		
7	1/17 (Thu)		Leakage Current		
8	1/22 (Tue)		Thermistor		
9	1/23 (Wed)		Resonant Circuit		
10	1/24 (Thu)		Diode		
Levels for credit needed	Minimal requirement for credit grant (criteria common to all practical subjects of Sch. Med. Sci.): 1) At least 2/3 attendance to the class, and 2) Submission of reports evaluated as Grade C or higher..				
Text and materials	Photocopies, Ref., 医用工学概論 (医歯薬出版)				
Grade evaluation	In addition to performance in the class and the report evaluation, examinations may be underwent for particular subjects. For this subjected, evaluation is made by 【Attendance and report submission】 .				
Remarks :					
After 2nd practice, one of the practices described in 2nd-10th is performed.					