

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. B 105	
Instructors (Office・Tel・email・Office hour)						
Hirotooshi Miyoshi (Graduate School of Medical Science Build. 309, 3253, hmiyoshi@md.tsukuba.ac.jp) Keiko Ookawa (Graduate School of Medical Science Building 308)						
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	1/9 (Tue)	Miyoshi & Ookawa	Orientation			
2	1/10 (Wed)		Operational Amplifier			
3	1/11 (Thu)		Differential Amplifier			
4	1/16 (Tue)		Rectifier Circuit			
5	1/17 (Wed)		Filter Circuit			
6	1/18 (Thu)		Frequency Characteristics of Electrocardiograph			
7	1/22 (Mon)		Leakage Current			
8	1/23 (Tue)		Thermistor			
9	1/24 (Wed)		Resonant Circuit			
10	1/25 (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.						