Advanced Science and Technology for Biomedical Sensors

Lecture (Code: 1351, 1st-year: 4 units, 2nd-year: 2 units)
Practice (Code: 1352,1st-year: 2units, 2nd-year: 2 units)
Lab (Code: 1353, 1st-year: 2 units)

1. Instructors:

Professor: Dr. Kohji Mitsubayashi Junior Associate Professor: Dr. Hiroyuki Kudo
Contact person: Prof. Dr. Kohji Mitsubayashi TEL 03-5280-8091 E-mail m.bdi@tmd.ac.jp

2. Course Description and Timetable

Lecture

Goals/outline:

The lecture is designed to provide a basic understanding of both biosensing devices and bioinstrumentation for advanced medicine. You will learn principles, methods and applications of advanced biomonitoring techniques in detail.

Available programs:

Lecture	As needed
Special Lecture	As needed
Seminar	As needed
Journal Club	Monday 17:00 – 18:30

Practice

Goals/Outline:

This session is conducted in 'presentation', 'discussion' and 'recitation' format. You will learn actual device development and scientific method of solving problem with guidance by biosensors / bioinstrumentation experts.

Available program:

Conference	Thursday 13:30 – 15:00
Technical practice	As needed

Lab

Goals/Outline:

We will start with some training sessions (research planning, equipment operation, data processing) and then you join one of the research projects on biomedical devices or/and medical applications.

3. Format:

This course is taught in an on-the-job training style. You will attend a research project on advanced biomonitoring under the direction of the research staffs.

4. Venue:

Room 3, Dept. of Biomedical devices and instrumentation (Institute of Biomaterials and Bioengineering, 5th floor)
Conference room 1 (Institute of Biomaterials and Bioengineering, 3rd floor)

5. Grading:

The overall grading scheme is based on your participation and the final project.