

Integrative Biomedical Sciences for Preemptive Medicine II

(code: 6416 1st or 2nd year : 1 units)

Attendance hours	12
No attendance hours	3
Total hours	15

1. Instructor(s)

Professor, ISHIKAWA Kinya

2. Course Purpose and Outline

Course Purpose

To widely understand the applications for integrative biomedical sciences for preemptive medicine, a learning system for preemptive medicine that enables prevention of diseases by collecting omics information such as genome information, information about environmental factors, clinical information and lifestyle information, discovering the factors and mechanism involved in diseases such as cancer and lifestyle related diseases, developing the predictive models and instructing/intervening in individuals.

Outline

To learn the following case examples, instruction, and intervention: utilization of the practical health/medical information to promote preemptive medicine and individualized medicine, advanced omics experiment/analysis methods using the next-generation sequencers, topics about the development story of biological information sensing such as wearable mobile, utilization of analytical technologies including AI.

3. Course Objective(s)

This course will provide a broad-based education that helps to develop a comprehensive overview of the field of disease prevention sciences.

4. Lecture Style

The leading experts in Integrative Biomedical Sciences for Preemptive Medicine will be invited and the course will focus on student participation and discussion.

5. Grading System

Participation (50%), question and answer (20%), and reports (30%).

6. Prerequisite Reading

None

7. Reference Materials

None

8. Important Course Requirements

None

9. Language used in class

The classes will be offered in English.

10. Office Hour

ISHIKAWA KINYA:10:00 AM-2:00 PM, every Tuesday, at The Center for Personalized Medicine for Healthy Aging, 16th Floor, Medical University Hospital

11. Note(s) to students

This is compulsory elective course for Integrative Biomedical Sciences Programs for Preemptive Medicine students. Enrollment will be limited, with priority given to the course students.

We will inform the students who registered these lectures as soon as the date, time and venue have been decided upon conclusively.