2026 Akita University Faculty of Medicine Syllabus

Category ： 基礎医学アドバンストコース
Course Title ： Advanced Clinical Anatomy
Eligible Students ： grade 2 Elective Course
Code ： 71564009
Schedule ： week 31 〜 week 31
Credits ： 1

1. **Lead Instructor**

Yoshio Bando (Professor, Dept. of Anatomy, 6053, Office Hour: 随時（要アポイントメント）)

2. **Instructors**

Yoshio Bando (Professor, Dept. of Anatomy, 6053, Office Hour: 随時（要アポイントメント）)
Ryoji Suzuki (Associate Professor, Dept. of Anatomy, 6054, Office Hour: 随時（要アポイントメント）)
Hiroshi Minagawa (Part-time Lecturer, Johto Orthopedic clinic)
Masahi Matsuzaki (Part-time Lecturer, Sonic Japan holdings)
Hitoyuki Watanabe (Part-time Lecturer, Johto Orthopedic clinic)
Mari Kishibe (Part-time Lecturer, Asahikawa Medical University)

3. **Course Description Outline(Course Objectives)**

Aim

In order to understand the pathophysiology of each disease required in clinical practice and practice medical treatment, we perform regional anatomy to deeply understand. Also through lectures by the outstanding specialist in orthopedics and cardiology, you will learn the principles and basic operations of ultrasound equipment, as well as the basic view of ultrasound images. Moreover, you will also be asked to understand current regional medical care and issues in Akita and you are facing in various issues of regional medical care in the case of Akita. Professionalism, medical ethics, medical safety, medical law (system) and EBM are also practiced in this course.

Overview

In addition to reviewing the knowledge of anatomy (including neuroanatomy and osteology) from the second half of the first year to the first half of the second year, students learn the principles and operation of diagnostic ultrasound equipment from scratch from a medical equipment developer, so that they can actually operate the equipment themselves. In this course, students also will learn from the physician and the physiotherapist who are working at the front lines of medicine at universities and in local communities to understand the importance of clinical anatomy and the practice of ultrasound diagnosis based on anatomy. Moreover, students will learn about the actual conditions and challenges of community medicine, the abilities required in community medicine, and prospects, which will be utilized in clinical medicine lectures and practical training in the future. The course is designed to be used in future lectures and practical training in clinical medicine.(PR-01〜04, GE-01-01-01, GE-02-01, GE-02-02-01〜03, GE-03-03, GE-03-05-01, GE-03-05-03〜04, LL-01, LL-02, RE-01, RE-02-01, RE-03-01〜03, RE-04-01-02〜03, PS-01-02-01〜05, PS-01-02-9〜21, PS-01-02-23〜26, PS-01-04-05, PS-01-04-13〜15, PS-02-01, PS-02-(02〜11, 13, 15〜17)-01, PS-02-(02〜11, 13〜17)-05),PS-02-05-02〜03, PS-02-06-04, IT-01-01, IT-01-02-02, IT-02-01, IT-02-02, IT-03-02, CS-02-03-05, CS-02-03-07, CS-02-04-36,CM-01-01-01, CM-01-01-03, CM-01-01-05, IP-02-01〜04, S0-06-01-03)

(references)

1)Understand and explain the major organs.
2)Explain the structure and function of major organs, vessels and nerves.
3)Explain the elbow and carpal joints and their surrounding structures (ligaments, tendons, blood vessels, nerves).
4)Explain the structure and function of the heart.
5)Explain the principle of ultrasound equipment.
6)Can perform basic operations of ultrasound equipment.

7)By associating the normal ultrasound image of the joint obtained using the ultrasound equipment with the image of the joint structure observed by regional anatomy, the information obtained from the ultrasound image can be explained accurately.
8)By associating the normal ultrasound image of the heart obtained using an ultrasound device with the image of the heart structure observed by local anatomy, the information obtained from the ultrasound image can be explained accurately.
9)Be able to explain the problems and required clinical abilities of community medicine related to this area,and express one's own thoughts on the solutions.
10)Professionalism, medical ethics, medical safety, medical law (system), related to this area, EBM Can explain and practice.

4. **Textbook/Reference Books**

1.Textbook
Gray's anatomy (Elsevier Japan)
Clinical Neuroanatomy (Elsevier Japan / Ishiyaku Publications)
Neuroanatomy Lecture Note (Kinhodo)
Anatomy training tebiki (Nanzan-do)
Anatomy Atlas (Netter, Gray, Prometheus Anatomy, etc.)

2. Reference book
Moore Clinical Anatomy (Medical Science International)
Anatomy for clinical practice (Medical Science International)

5. **Assessment**

Comprehensive evaluation will be made based on the approach to practical training, attendance status, and report assignments in special lectures and practical training.

6. **Out of Class Study/Message**

In this course, we will practice a new medical education (integrated curriculum) that integrates anatomy (basic) and clinical practice. Due to the short implementation period, you yourselves set the composition of the group, the training schedule, the contents and the goals to be achieved before the start of this course. It is desirable to work voluntarily according to the rules (notify the students separately). In addition, attendance at the cremation held after the end of this course must be required (scheduled date on the syllabus and undecided). If the schedule changes due to the situation, we will notify you in advance.

Number of students to be accepted: About 12

Topics and Contents of class, Course Objectives						
	Class Date	**Period**	**Class Format**	**Topics and Contents of class, Course Objectives**	**Instructors**	**Class Room**
1	11 / 30 (Mon)	1-10	Practice	Theme: Regional anatomy Perform regional dissection based on the tasks and goals set for each group Virtual anatomical table ”anatomage” will be also used in conjunction.	Yoshio Bando Ryoji Suzuki	第 1 実習室
2	12 / 1 (Tue)	1-10	Practice	Theme: Regional anatomy Perform regional dissection based on the tasks and goals set for each group	Yoshio Bando Ryoji Suzuki	第 1 実習室
3	12 / 2 (Wed)	1-4	Practice	Theme: Regional anatomy 1)Perform regional dissection based on the tasks and goals set for each group 2)Observe the elbow and carpal joints and their surrounding structures and explain their characteristics.	Yoshio Bando Ryoji Suzuki	第 1 実習室
4	12 / 2 (Wed)	5-10	Practice	Theme: Observation of joints and nerves by ultrasound Understand the principles and basic operations of ultrasonic diagnostic equipment. 1)Explain the principle of ultrasonic diagnostic equipment. 2)Explain the advantages and disadvantages of ultrasonic diagnostic equipment. 3)Can perform basic operations of ultrasonic diagnostic equipment. 4)Operate the device by yourself with ultrasound images of elbows and wrists 5)Can explain a normal structure and an abnormal structure with ultrasound images. 6)Explain the problems and the clinical capabilities in community medicine in Akita in the field of orthopedics.	Yoshio Bando Hiroshi Minagawa Masahi Matsuzaki Hitoyuki Watanabe	第 1 会議室（予定）
5	12 / 3 (Thu)	1-10	Practice	Theme: Regional anatomy 1)Perform regional dissection based on the tasks and goals set for each group 2)Observe heart and the surrounding structures and explain their characteristics.	Yoshio Bando Ryoji Suzuki	第 1 実習室
6	12 / 4 (Fri)	1-4	Practice	Theme: cleaning of the practical room, encoffinment and cremation cleaning of the practical room, encoffinment and cremation	Yoshio Bando Ryoji Suzuki	第 1 実習室
7	12 / 4 (Fri)	5-8	Lecture	Theme: Basic medical research in neurological diseases 1) grow research-mind up to be a physician/scientist 2) learn how to do research 3) understand the meaning of medical research	Yoshio Bando	第 1 会議室（予定）
8	12 / 4 (Fri)	9-10	Lecture	Theme: Clinical Anatomy for Dermatology Basic anatomy for clinical use	Mari Kishibe	第 1 会議室（予定）
9	12 / 7 (Mon)	1-10	Other	Theme: Cremation Must attend cremation（To Be Decided）	Yoshio Bando Ryoji Suzuki	