

## 2025 Akita University Faculty of Medicine Syllabus

**Category** : 臨床医学 VI (CC2)  
**Course Title** : Orthopedics  
**Eligible Students** : grade 5 Elective Course  
**Code** : 71644006-12

### 1. Lead Instructor

Naohisa Miyakoshi (Professor, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)

### 2. Instructors

Naohisa Miyakoshi (Professor, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Michio Hongo (Professor, School of Health Science, Physical therapy, 6532)  
Yuji Kasukawa (Associate Professor, Rehabilitation Medicine, 6148, Office Hour: 9 : 00-17 : 00)  
Koji Nozaka (Associate Professor, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Hiroyuki Tsuchie (Lecturer, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Hiroyuki Nagasawa ((IGAKUBU) Lecturer, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Hidetomo Saito ((IGAKUBU) Lecturer, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Hiroaki Kijima ((IGAKUBU) Lecturer, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Tsuyoshi Shirahata (Assistant Professor, Advanced Emergency and Critical Care Center, 6148, Office Hour: 9 : 00-17 : 00)  
Daisuke Kudo (Assistant Professor, Rehabilitation Medicine, 6148, Office Hour: 9 : 00-17 : 00)  
Ryota Kimura (Assistant Professor, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)  
Yuichi Ono (Assistant Professor, Department of Orthopedic Surgery, 6148, Office Hour: 9 : 00-17 : 00)

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

#### *Aim of class*

In clinical practice CC1, students mainly learned the basic qualities and abilities required of a doctor (medical model core curriculum A item), the normal structure and function of each organ of the human body, pathology, diagnosis, and treatment (same D item). By the way, in CC2, as a developmental item, you will learn to acquire research mind and professionalism as a doctor through medical care for patients as a member of the medical team. Also, learn about related medical ethics, medical behavioral science, medical safety, medical law (system), and EBM.

#### *Outline of class*

Focusing on the following items shown in the medical education model core curriculum, learn through ward practice, outpatient practice, surgery practice, and lectures. During the 4- to 5-week training period, students engage in daily clinical practice and learn as a member of each clinical group for spine, knee joint, hip joint, upper extremity trauma, lower extremity trauma, bone and soft tissue tumors, and rehabilitation.

#### A-1-2 Patient-centered perspective

- Explain the significance and necessity of informed consent and informed assent. (1-2)

#### A-1-3 Responsibilities and discretion as a doctor

- Build a relationship of trust with patients and their families in clinical practice. (1-1, 1-2, 2-1 to 2-7)

#### A-2-1 Ability to explore and solve problems

- Discover specific methods to solve problems and solve them. (5-1 to 5-5)

#### A-2-2 How to study

- Extract important matters and problems from the content of lectures, domestic and foreign textbooks and papers, search information, etc. (5-1 ~ 5.5, 6-1, 6-2)

#### A-3-1 Holistic practical ability

- Properly take medical history, build a good relationship with the patient, and provide patient education as necessary. (2-1 ~ 2-8, 4-1 ~ 4-5)

#### A-4-1 Communication

- Realize good human relations through communication. (2-1 ~ 2-8, 4-7)

#### A-4-2 Relationship between patient and doctor

- Understand the confidentiality of patient information and the importance of providing information to patients, etc., and be able to handle them appropriately. (1-1, 1-2, 3-5, 4-5)

#### A-5-1 Patient-centered team medical care

- Participate as a member of the team by explaining the composition of the medical team, the division of roles of each member, and the system of cooperation and responsibility. (2-5, 2-6, 3-6, 4-7)

#### A-6-1 Ensuring safety

- Concretely explain that multi-professionals are involved in multi-stage medical work content in actual medical care. (2-5, 2-6, 3-5, 3-6, 4-5, 4-7)

#### A-6-2 Coping with and preventing medical accidents

- Explain the difference between medical accidents and complications. (2-5, 2-6, 3-5, 3-6, 4-7)

#### A-6-3 Health and safety of healthcare workers

- Explain the necessity of standard precautions and implement them. (3-4, 3-5, 4-4, 4-6)

#### A-7-1 Contribution to community medicine

- Actively participate in and contribute to community medicine. (3-7, 4-8)

#### A-8-1 Cultivate a desire for medical research

- Analyze pathological conditions experienced in clinical practice based on the knowledge acquired in life science lectures and practical training. (5-1 ~ 5-5, 6-1, 6-2)

#### A-9-1 Preparation for lifelong learning

- Reflect on what you have experienced in clinical training and clarify your own issues. (6-1, 6-2)

#### B-1-1 Basics of Statistics

- Describe and summarize data. (3-2, 5-2, 5-3)

#### B-1-3 Evidence-based medicine (EBM)

- List the 5 steps of evidence-based medicine (EBM). (3-3, 4-4)

#### B-1-8 Systems of health, medical care, welfare and nursing care

- Explain the current situation and system of welfare for persons with disabilities. (3-7)

#### B-3-1 Medical research and ethics

- Explain medical research and ethics. (1-1)

#### G-1-1-(1) Basic qualities and abilities required of a doctor (1-1, 1-2, 2-1 ~ 2-8)

#### G-1-1-(2) Basics of medical care (2-1 ~ 2-8, 3-1 ~ 3-7)

#### G-1-1-(3) Roles that can be trusted and entrusted to students (4-1 ~ 4-8)

#### G-2-35 Lumbar back pain (3-1 ~ 3-3, 4-1 ~ 4-6)

#### G-2-36 Joint pain/joint swelling (3-1 ~ 3-3, 4-1 ~ 4-6)

#### G-2-37 Trauma/burn (3-1 ~ 3-3, 4-1 ~ 4-6)

#### G-3-1 General procedures (4-6)

#### G-3-3 Surgical procedure (4-6)

Explain related professionalism, ethics, medical behavioral science, medical safety, medical law (system), and EBM. (1-1, 1-2, 2-1 ~ 2-8, 3-6, 4-8, 5-1 ~ 5.5, 6-1, 6-2)

*How to proceed with the class*

## 1. Ward practice

Attend daily ward rounds and discuss wound care, physical examination, postoperative rest, etc. with the attending physician. Accomplish learning objectives through individual case studies of 1-2 cases. Review the imaging findings, medical interview, and physical examination of your case. Create a report with a literature review, receive guidance from the teacher in charge, and present the case in charge at a conference.

#### 2. Outpatient practice

Practice the basics of medical interviews, physical examinations, interpretation of image findings, and actual rehabilitation. Observe how preceptors and therapists treat patients and learn how to treat them.

#### 3. Surgery practice

Participate in surgery, deepen your understanding of local anatomy, perform medical actions (simple suturing, etc.) approved by student doctors under the guidance of a doctor, and strive to acquire basic clinical techniques.

#### 4. Practicum for research activities

It is possible to participate in research activities between medical treatments. My goal is to get people interested in what is currently underway, such as biomechanical research, bone metabolism, and regenerative medicine experiments.

#### 5. Regional medical practice

Upon request, it is possible to conduct training centered on surgical practice at facilities other than the medical school hospital.

### 4. Textbook/Reference Books

*Orthopedics*

Standard Orthopedic Surgery (Igaku Shoin)

TEXT Orthopedic Surgery (Nanzando)

Orthopedics and Traumatology (Bunkodo)

Orthopedic MOOK Series (Kanehara Publishing)

New Illustrated Clinical Orthopedic Course (Medical View)

Illustrated Orthopedic Diagnosis and Treatment Course (Medical View)

The latest orthopedic system (Nakayama Shoten)

#### 【Department of Rehabilitation】

Rehabilitation medicine/medical core text 2nd edition (supervised by the Japan Society of Rehabilitation Medicine, published by Igaku Shoin, price 4,400 yen (main text 4,000 yen + 10% tax)

Orthopedic postoperative physical therapy program 3rd edition (Medical View)

### 5. Assessment

Those who do not attend the clinical training without permission or who do not submit a report will not be deemed to have completed the clinical training.

Submit the report by email as an attachment in Word or PDF format.

Submission email address: seikei@doc.med.akita-u.ac.jp

Grades will be evaluated by CC-EPOC. Evaluation items are learning attitude before training, doctor-patient relationship, time management, clothes, attitude, skills related to inter-professional cooperation, medical attitude and willingness to learn, attitude toward medical care and skills, and comprehensive evaluation.

### 6. Out of Class Study/Message

#### 【Notes】

##### 1. Punctuality

8:00 a.m. on the first day: Meet at the conference room on the 8th floor of Ward 1

Follow the instructions of the medical treatment group you belonged to regarding the meeting place and meeting time after the first day.

##### 2. Report

Create a report (summarize it on the prescribed report form) for one of the cases you have been in charge of, and submit it by e-mail within two weeks after the end of the practical training.

3. Consider clinical attire.

4. The class schedule (1st to 5th) on the next page is a weekly schedule. This weekly schedule will be repeated 4-5 times.

整形外科学・リハビリテーション科 臨床実習

Schedule		Contents of Class
1	<p>Mon [ 8:00-17:30 ]</p> <p>Subtitle Orientation, ward practice, pre- and postoperative conferences, general rounds, abstract reading</p> <p>Instructor Miyakoshi, Hongo, Kasukawa, Nozaka, Nagasawa, Kijima</p>	<p><i>On the first day of training, gather at the conference room on the 8th floor of Ward 1 until 8:00</i>  <i>On Mondays other than the first day of training, each medical group will act.</i></p> <p>(First day only) Orientation  Ward training/outpatient training  <b>【afternoon】</b>  Pre- and post-operative conferences, general rounds  Abstract reading</p>
2	<p>Tue [ 8:00-17:30 ]</p> <p>Subtitle Each clinical group Ward practice/Outpatient practice/Surgery practice</p> <p>Instructor Hongo, Nozaka, Saito, Hongo, Nozaka, Saito, Tsuchie</p>	<p>Act for each medical group.  <b>【morning】</b>  Ward training/Outpatient training/Surgery training  <b>【afternoon】</b>  Outpatient practice/Surgery practice</p>
3	<p>Wed [ 8:00-17:30 ]</p> <p>Subtitle Each clinical group Ward practice/Outpatient practice</p> <p>Instructor Shirahata, Tsuchie, Kudo, Kimura</p>	<p>Act for each medical group.  <b>【morning】</b>  Ward training/outpatient training  <b>【afternoon】</b>  Outpatient training/examination technique training</p>
4	<p>Thu [ 8:00-17:30 ]</p> <p>Subtitle Each clinical group Ward practice/Outpatient practice/Surgery practice</p> <p>Instructor Hongo, Kasukawa, Nozaka, Saito, Kimura</p>	<p>Act for each medical group.  <b>【morning】</b>  Ward training/Outpatient training/Surgery training  <b>【afternoon】</b>  Outpatient practice/Surgery practice</p>
5	<p>Fri [ 8:00-17:30 ]</p> <p>Subtitle Each clinical group Ward practice/Outpatient practice/Surgery practice</p> <p>Instructor Nagasawa, Kijima, Shirahata, Kudo</p>	<p>Act for each medical group.  <b>【morning】</b>  Ward training/Outpatient training/Surgery training  <b>【afternoon】</b>  Outpatient practice/Surgery practice</p>