

## 2022 Akita University Faculty of Medicine Syllabus

<b>Category</b>	: 臨床医学 II
<b>Course Title</b>	: Diagnostic Radiology and Radiation Oncology
<b>Eligible Students</b>	: grade 3 Related Course
<b>Code</b>	: 71633027
<b>Schedule</b>	: week 30 ~ week 35
<b>Credits</b>	: 1

### 1. Lead Instructor

Koichi Ishiyama (Associate Professor, Department of Radiology, 6179, Office Hour: North Clinical Research Building 1F Conference Room (12:00 13:00))

### 2. Instructors

Koichi Ishiyama (Associate Professor, Department of Radiology, 6179, Office Hour: North Clinical Research Building 1F Conference Room (12:00 13:00))

Yuki Wada (Lecturer, Department of Radiology, 6179)

Takahiro Otani (Assistant Professor, Department of Radiology, 6179)

Noriko Takagi (Assistant Professor, Department of Radiology, 6179)

Masazumi Matsuda (Assistant Professor, Department of Radiology, 6179)

Tomoki Tozawa (Assistant Professor, Department of Radiology, 6179)

Motoko sasajima (Assistant Professor, Department of Radiology, 6179)

Satoshi Kumagai (Medical Doctor, Department of Radiology, 6179)

Satoshi Takahashi (Part-time Lecturer, Hiraga General Hospital)

Toshibumi Kinoshita (Part-time Lecturer, Akita Cerebrospinal r and Cardiovascular Center)

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

#### 授業の概要

画像を用いた形態診断・機能診断の概略を学ぶ

放射線を用いた緩和・根治治療を学ぶ

#### ねらい

放射線などを使用した診断と治療の基本を学ぶ

災害時を含めた放射線防護・管理の基本を学ぶ

In this course, you will learn to outline morphological and functional diagnosis using imaging, and palliative and curative treatment using radiation.

You will learn the basics of diagnosis and treatment using radiation and other techniques, as well as the basics of radiation protection and management, including disaster management.

### 4. Textbook/Reference Books

標準放射線医学 (医学書院)、必修放射線医学 (南江堂)、新臨床 X 線診断学 (医学書院)

## 5. Assessment

統一試験、出席状況、小テストにより評価する

Attendance, reports and examinations

## 6. Out of Class Study/Message

若干の授業変更の可能性があるので、掲示板で確認すること  
指定教科書や事前配布資料などで、予習・復習をしておくこと

Slight changes may occur depending on the schedule of the instructor.

Prepare and review with designated textbooks and handouts.

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
1	12 / 9 (Fri)	1-2	Lecture	Theme: 造影剤 基礎・臨床 Basics and clinical application of the contrast medium <ul style="list-style-type: none"> <li>・造影剤の基礎と臨床応用を説明できる。</li> <li>・ Outline the basics and role of contrast medium in clinical imaging practice.</li> </ul>	Koichi Ishiyama	医学系研究棟 4階 6講
2	12 / 9 (Fri)	3-4	Lecture	Theme: 骨盤・乳腺画像診断 Imaging diagnosis of the pelvis and breast <ul style="list-style-type: none"> <li>・骨盤部乳腺疾患の画像所見を説明できる。</li> <li>・ Explain diagnostic imaging results of pelvic and mammary gland disease.</li> </ul>	Koichi Ishiyama	医学系研究棟 4階 6講
3	12 / 9 (Fri)	5-6	Lecture	Theme: 救急疾患の画像診断 Imaging diagnosis of the emergency diseases <ul style="list-style-type: none"> <li>・よく経験する救急疾患の画像所見を説明できる。</li> <li>・ Explain diagnostic imaging results of commonly-experienced illnesses.</li> </ul>	Tomoki Tozawa	医学系研究棟 4階 6講
4	12 / 9 (Fri)	7-8	Lecture	Theme: IVR I <ul style="list-style-type: none"> <li>・IVR 治療の概要を説明できる。</li> <li>・ Explain the role of interventional radiology.</li> </ul>	Tomoki Tozawa	医学系研究棟 4階 6講
5	12 / 10 (Sat)	9-10	Lecture	Theme: 放射線治療入門と最先端治療 Basics and state-of-the-art radiation therapy <ul style="list-style-type: none"> <li>・放射線治療の基本を説明できる。</li> <li>・最先端の放射線治療を概説できる。</li> <li>・ Explain the basics of radiation therapy.</li> <li>・ Outline state-of-the-art radiation therapy.</li> </ul>	Yuki Wada	医学系研究棟 4階 6講
6	1 / 6 (Fri)	5-6	Exercise	Theme: 小テスト short test 造影剤、骨盤・乳腺画像診断 Contrast medium, imaging diagnosis of the pelvis and breast	Koichi Ishiyama	医学系研究棟 4階 6講
7	1 / 6 (Fri)	7-8	Exercise	Theme: 小テスト short test 救急・IVR I Interventional radiology, imaging diagnosis of the emergency diseases	Tomoki Tozawa	医学系研究棟 4階 6講
8	1 / 6 (Fri)	9-10	Lecture	Theme: 緩和治療 Palliative care <ul style="list-style-type: none"> <li>・放射線を用いた緩和治療を説明できる</li> </ul> <p>Outline palliative care using radiation.</p>	Yuki Wada	医学系研究棟 4階 6講
9	1 / 13 (Fri)	5-6	Lecture	Theme: 頭頸部画像診断 <ul style="list-style-type: none"> <li>・頭頸部疾患の画像所見を説明できる</li> </ul> <p>Explain diagnostic imaging results of head and neck disease.</p>	Takahiro Otani	医学系研究棟 4階 6講

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10	1 / 13 (Fri)	7-8	Lecture	Theme: 放射線同位元素による治療と診断 ・放射線同位元素を使用した画像診断 ・治療を説明できる  Explain diagnostic imaging results and treatment using radiation isotopes.	Masazumi Matsuda	医学系研究棟 4階 6講
11	1 / 13 (Fri)	9-10	Lecture	Theme: 放射線防護・管理 ・病院内で必要な放射線防護を説明できる ・災害時を含めた放射線による障害を説明できる  Explain radiation protection required in the hospitals. Explain radiation damage, including during disasters.	Yuki Wada	医学系研究棟 4階 6講
12	1 / 20 (Fri)	5-6	Lecture	Theme: IVR II ・画像誘導下治療法を説明できる  Explain interventional radiology.	Satoshi Takahashi	医学系研究棟 4階 6講
13	1 / 20 (Fri)	7-8	Lecture	Theme: 放射線治療一般 I ・一般に行われる放射線治療を説明できる  Explain common radiation therapy.	Satoshi Kumagai	医学系研究棟 4階 6講
14	1 / 20 (Fri)	9-10	Lecture	Theme: 放射線治療一般 II ・一般に行われる放射線治療を説明できる Understand common radiation therapy.	Noriko Takagi	医学系研究棟 4階 6講
15	1 / 27 (Fri)	5-6	Exercise	Theme: 小テスト Short test 放射線治療 Radiation therapy 防護、核医学、治療、放射線診療、多職種連携  Protection, nuclear medicine, radiation therapy, multidisciplinary collaboration.	Yuki Wada Noriko Takagi Satoshi Kumagai	医学系研究棟 4階 6講
16	1 / 27 (Fri)	7-8	Exercise	Theme: 小テスト short test RI, 防護・管理、IVR II Protection, nuclear medicine, IVR II	Yuki Wada Masazumi Matsuda Satoshi Takahashi	医学系研究棟 4階 6講 義室
17	1 / 27 (Fri)	9-10	Lecture	Theme: よく見る胸・腹部疾患の画像 胸腹部を主に普段よく目にする疾患の画像所見を説明できる。  ・ Explain diagnostic imaging results of commonly-seen diseases, mainly in the chest and abdomen.	Koichi Ishiyama	医学系研究棟 4階 6講 義室
18	2 / 3 (Fri)	5-6	Lecture	Theme: 中枢神経 機能と形態 I ・中枢神経系疾患の形態的特徴と機能診断のはたす役割を説明できる  Explain morphological characteristics of central nervous system diseases and their role in functional diagnosis.	Toshibumi Kinoshita	医学系研究棟 4階 6講 義室
19	2 / 3 (Fri)	7-8	Lecture	Theme: 脳疾患の画像診断 Central nervous diseases ・各種脳病変の画像診断を説明できる。  Explain imaging features of central nervous system diseases including inflammatory diseases.	Motoko sasajima	医学系研究棟 4階 6講 義室

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
20	2/3 (Fri)	9-10	Exercise	Theme: 小テスト 頭部、頭頸部 short test Head and neck,central nervous system 頭部、頭頸部 Head and neck.	Takahiro Otani Motoko sasajima Toshibumi Kinoshita	医学系研究棟 4階 6講義室