	Category					
	(科目区分)	Specialized subjects / Cancer treatment system				
	Course Title 授業科目名)	Oncology				
	Instructors (担当者名)	Hiroyuki Shibata	<mark>Academic Year</mark> (配当年次)	1,2		
El	quired Course/ ective Course (必修/選択)	Elective	<mark>Credits</mark> (単位数)	2		
	Class Format (授業形態)	Lecture, Exercise				
	<mark>Schedule</mark> (開講期間)	Apr. 2025 – Sep. 2025(schedule details on request)				
Cla	ss Date/Period 講曜日・時間)	Students will be contacted by e-mail after the course registration is completed.				
Cou	rse Outline/ Co	urse Objectives (授業の概要・到達目標)				
to understand how to conduct research for the development of new treatment methods and for the solution of future problems. Goals of the class: The goal of this course is to understand the actual status of cancer diseases in Japan and to be able to explain the concepts on which the most advanced treatments are based. Outline of the class: See "Course Outline / Course Objectives (Contents of Class)"						
Cou	rse Planning (授		I			
	Course Outline/ (Contents	Course Objectives(授業の概要及び到達目標)of Class(((授業内容))	<mark>Instructor</mark> (担当教員名)	Department (講座名) Class Room 〔実施場所〕		
1	Outline of ches			Thomasia Summery		
		c Surgery	Kazuhiro Imai	Thoracio Surgeny		
2	Lung cancer		Kazuhiro Imai Kazuhiro Imai	Thoracic Surgery [Research Building for		
2 3	Lung cancer Guideline of ch					
	Guideline of che The course foc of the kidney, p testis, that are Students are ex mechanism, epi		Kazuhiro Imai	[Research Building for		
3	Guideline of che The course foc of the kidney, p testis, that are Students are ex mechanism, epi the four major The course foc treatment of pr and understand adrogen depend	est surgery uses on overview and prospects of cancers rostate, upper urinary tract and bladder, and four major cancers in urologic oncology. kpercted to learn and understand the lology, diagnosis and moderan treatment of urologic cancers. uses on biology, epidemiology, diagnosis and ostate cancer, Especially, sutdents are learn the nature and molecular mechanisms of dency and independency of prostate cancer. the course covers modern drug therapy of	Kazuhiro Imai Kazuhiro Imai	[Research Building for		
3 4 5	Guideline of che The course foc of the kidney, p testis, that are Students are ex mechanism, epi the four major The course foc treatment of pr and understand adrogen depend Furthermore, th prostate cance The course cov treatment of re expected to lea immunology of	est surgery uses on overview and prospects of cancers rostate, upper urinary tract and bladder, and four major cancers in urologic oncology. kpercted to learn and understand the lology, diagnosis and moderan treatment of urologic cancers. uses on biology, epidemiology, diagnosis and ostate cancer, Especially, sutdents are learn the nature and molecular mechanisms of dency and independency of prostate cancer. the course covers modern drug therapy of	Kazuhiro Imai Kazuhiro Imai Tomonori Habuchi	[Research Building for Clinical Medicine 3F] Department of Urology		
3 4 5	Guideline of che The course foc of the kidney, p testis, that are Students are ex mechanism, epi the four major The course foc treatment of pr and understand adrogen depend Furthermore, th prostate cance The course cov treatment of re expected to lea immunology of the therapeutics an	est surgery uses on overview and prospects of cancers rostate, upper urinary tract and bladder, and four major cancers in urologic oncology. opercted to learn and understand the lology, diagnosis and moderan treatment of urologic cancers. uses on biology, epidemiology, diagnosis and ostate cancer, Especially, sutdents are learn the nature and molecular mechanisms of dency and independency of prostate cancer. the course covers modern drug therapy of r. vers etiology, mechanism, diagnosis, and nal cell carcinoma. Especially, students are irn the neovasculization and tumor renal cell carcinoma and its modern	Kazuhiro Imai Kazuhiro Imai Tomonori Habuchi Shintaro Narita	[Research Building for Clinical Medicine 3F] Department of Urology [conference room]		
3 4 5 6 7	Guideline of che The course foc of the kidney, p testis, that are Students are ex mechanism, epi the four major of The course foc treatment of pr and understand adrogen depend Furthermore, th prostate cance The course cov treatment of re expected to lea immunology of of therapeutics an Viral hepatitis t and	est surgery uses on overview and prospects of cancers rostate, upper urinary tract and bladder, and four major cancers in urologic oncology. opercted to learn and understand the lology, diagnosis and moderan treatment of urologic cancers. uses on biology, epidemiology, diagnosis and ostate cancer, Especially, sutdents are learn the nature and molecular mechanisms of dency and independency of prostate cancer. the course covers modern drug therapy of r. vers etiology, mechanism, diagnosis, and nal cell carcinoma. Especially, students are irn the neovasculization and tumor renal cell carcinoma and its modern id unsolved treatment problems.	Kazuhiro Imai Kazuhiro Imai Tomonori Habuchi Shintaro Narita Kazuyuki Numakura	[Research Building for Clinical Medicine 3F] Department of Urology		

	Course Outline/ Course Objectives (授業の概要及び到達目標)	Instructor	Department (講座名)		
	(Contents of Class) ((授業内容))	(担当教員名)	Class Room 〔実施場所〕		
10	Current Status of hepatocellular carcinoma and bile duct cancer	Junichi Arita	Gastroenterological Surgery [conference room at 1-6		
11	Current Status of pancreatic cancer	Junichi Arita			
12	Role of Surgical treatment on multidisciolinary approach for gastrointestinal cancer	Go Watanabe	ward]		
13	The molecular mechanisms of carcinogenesis	Hiroyuki Shibata	Dept. Clinical Oncol. [The 2nd Bild., The Hall 2]		
14	Cancer Genome Diagnosis -A new era of molecular targeted agents-				
15	Molecular targeted agents -translational research-	Hiroyuki Shibata			
Grading Criteria (成績評価の基準と方法)					

30 hours of lectures in the lecture room (laboratory) + 15 hours of self-study, 45 hours in total, will be one credit, and the evaluation will be made by comprehensively evaluating the attendance status and the contents of the submitted report.

Contact Information (問い合わせ先(氏名, メールアドレス等))

Name : Hiroyuki Shibata / E-mail : hiroyuki@med.akita-u.ac.jp

Comment (その他特記事項)

Information about courses: If you cannot attend the training due to work, such as a graduate student who is a member of society, we will adjust the schedule.

Textbooks / References: Distribute materials as needed. Alternatively, specify the document.

Self-study content during self-study time: It is desirable to carry out preparatory learning according to the goals to be achieved and the content of the lesson.