Category (科目区分)	Cluster of Inflammation and immune system		
Course Title (授業科目名)	Immunology		
Instructors (担当者名)	Satoshi ISHII	Academic Year (配当年次)	1,2
Required Course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	1
Class Format (授業形態)	Lecture		
Schedule (開講期間)	Students will be notified by email after the course registration is complete.		
Class Date/Period (開講曜日 • 時間)	Students will be notified by email after the course registration is complete.		

Course Outline/ Course Objectives (授業の概要・到達目標)

Course Objectives: This lecture is designed to help students understand immune regulatory mechanisms and allergic diseases.

Course Outline:

Adaptive immune responses are elicited by dendritic cells. We will study the sophisticated immune regulatory mechanisms by dendritic cells at the molecular, cellular, and individual levels. (by Prof. Ishii)

Lymphocytes, eosinophils, and other granulocytes are thought to be the main cells responsible for autoimmune and allergic diseases caused by imbalances in the immune system. In this class, we will discuss the respiratory system in which eosinophils and other inflammatory cells are involved, and deepen our understanding of the cellular biological mechanisms of immunological and allergic diseases. (by Prof. Ueki)

Course Planning (授業計画)

	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〕
1 2 3 4 5	Understand the immune system with a focus on dendritic cells	Professor: Satoshi ISHII	Immunology [Reserch Building for Basic Medicine 2F]
6 7 8 9 10	Understand the pathogenesis of inflammation, with a focus on granulocytes, especially eosinophils	Professor: Shigeharu UEKI	General Internal Medicine and Clinical Laboratory Medicine (Doctor's office, South Clinical Building 4F)

Grading Criteria (成績評価の基準と方法)

Oral and written examination, reports, attendance and attitude

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

Name: Satoshi ISHII / E-mail: satishii@med.akita-u.ac.jp Name: Shigeharu UEKI / E-mail: shigeharu.ueki@gmail.com

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.