

<b>Course number</b>	U-LAS70 10002 SE50				
<b>Course title (and course title in English)</b>	ILAS Seminar-E2 :It's a Bug's Life - bacteria and viruses (微生物の世界へようこそ) ILAS Seminar-E2 :It's a Bug's Life - bacteria and viruses	<b>Instructor's name, job title, and department of affiliation</b>	Graduate School of Medicine Associate Professor, KIM MINSOO		
<b>Group</b>	Seminars in Liberal Arts and Sciences	<b>Number of credits</b>	2	<b>Number of weekly time blocks</b>	1
<b>Class style</b>	seminar (Face-to-face course)	<b>Year/semesters</b>	2025 · First semester		<b>Quota (Freshman)</b> 12 (12)
<b>Target year</b>	Mainly 1st year students	<b>Eligible students</b>	For all majors		<b>Days and periods</b> Fri.5
<b>Classroom</b>	3C, Yoshida-South Campus Academic Center Bldg. North Wing			<b>Language of instruction</b>	English
<b>Keyword</b>	Virology-related / Bacteriology-related / Infectious disease medicine-related / Immunology-related / Vaccine				
<b>[Overview and purpose of the course]</b>					
<p>The human body has over 10 trillion cells, but it has 10 times that number of microbial cells living in and on our body. These microbes are therefore an important part of our body. Some commensal bacteria are beneficial to our health whereas new viruses and bacteria that continue to emerge and reemerge may result in unpredictable life-threatening epidemics. To overcome such infectious diseases, we need a better understanding of the molecular mechanisms of host-microbe interactions so as to develop new concepts for antibiotics or vaccines.</p> <p>This course focuses on the basics of microbiology, immunology, and environmental microbes. Particular emphasis is placed on understanding viruses, bacteria, the interaction between microorganisms and host cells, and the identification of microorganisms in our environment. During the course, students will actively participate in discussions and in the exchange of ideas.</p>					
<b>[Course objectives]</b>					
<p>To identify and understand the major microbes that impact our lives.  To understand the infection phenomenon.  To enhance your critical thinking skills and effectively discuss scientific topics.</p>					
<b>[Course schedule and contents]</b>					
<ol style="list-style-type: none"> <li>1. Introducing the invisible world</li> <li>2. What is a microbe?</li> <li>3. The basics of bacteria</li> <li>4. Microbiota and human health</li> <li>5. Soil bacteria and the environment</li> <li>6. Identification of bacteria (field work 1)</li> <li>7. Identification of bacteria (field work 2)</li> <li>8. Diversity of viruses</li> <li>9. Viruses and Cancer</li> <li>10. Zoonotic viruses</li> <li>11. Viruses in our environment</li> <li>12. Recognition of microbes</li> </ol>					
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13. Battle against microbes
  14. Life with or without microbes
  15. Student presentation
  16. Feedback

**[Course requirements]**

None

**[Evaluation methods and policy]**

Evaluation will be based on class attendance and participation (60%), and final presentation (40%).

**[Textbooks]**

授業中に「プリント配付」する。

**[References, etc.]**

( References, etc. )

Introduced during class

**[Study outside of class (preparation and review)]**

To achieve the course goals students review the course handouts.

**[Other information (office hours, etc.)]**

Please feel free to come to my office at any time.

Please take out the accident insurance of Personal Accident Insurance for Students Pursuing Ed. & Rsch. as needed.

Field work: In the Kyoto Univesrity campus. We look for microorganisms on campus.

**[Essential courses]**