Course number	U-LAS70 10002 SE50				
Course title (and course title in English)	ILAS Seminar-E2 :Let's create 3D computer animations（三次元アニメーションを作ってみよう） ILAS Seminar-E2 :Let's create 3D computer animations	Instructor's name, job title, and department of affiliation	Graduate School of Medicine Associate Professor,PATAKY，Todd		
Group	Seminars in Liberal Arts and Sciences	Number of credits	2	Number of weekly time blocks	1
Class style	seminar (Face-to-face course)	Year/semesters	2025・First semester	Quota (Freshman)	8 (8)
Target year	Mainly 1st year students	Eligible students	For all majors	Days and periods	Fri.5
Classroom	Lecture room 6, 2F, School of Human Health Sciences, Faculty of Medicine (Faculty of Medicine/Pharmaceutical Science Campus/ University Hospital Campus)	Language of instruction	English		
Keyword	3D modeling / computer graphics / character animation / Blender				

[Overview and purpose of the course]

This course introduces the basics of computer-based 3D modeling (shape design, lighting, materials, surface textures) and animation (keyframes, object motion, camera zooming and panning, etc.). The open-source software “Blender” (blender.org) will be used for all lessons. Blender can be used for free on Windows, Mac and Linux. As a final project, you will create a short animated movie. Programming experience is recommended but not required.

[Course objectives]

Students will become familiar with the main concepts of 3D modeling and animation. They will learn how to reproduce simple example 3D models and animations. After some initial general assignments, focus will shift to Final Projects, which students will work on for most of the semester. The goal of Final Project is to create a 60 s (or longer) animation. The animation theme, style and techniques are all free, to be chosen by each student based on your interests. The instructor will help students to choose a Final Project that is challenging, but also achievable. The instructor will also help you solve Final Project modeling and animation problems as you encounter them.

[Course schedule and contents)]

The following weekly topics will be covered:

1) Introduction: 3D Modeling & Blender
2) 3D Modeling I: Importing & Creating Shapes
3) 3D Modeling II: Materials & Lighting
4) Animation I: Basics
5) Animation II: Camera Motion & Arranging
6) Project Presentations I: Initial Results
7) Character Modeling I: Armatures
8) Character Modeling II: Armature Animation
9) Character Modeling III: Skins & Deformations
10) Project Presentations II: Progress Report
11) Advanced Topics I: UV Editing

Continue to ILAS Seminar-E2 :Let's create 3D computer animations（三次元アニメーションを作ってみよう）(2)↓↓↓

12) Advanced Topics II: Environments
13) Advanced Topics III: Physics
14) Final Project Presentations & Future Learning
15) Feedback

[Course requirements]

There are no specific requirements for this class. However, students must be willing to work with open-source software, which is relatively poorly documented compared to commercial software. The class instructor will help with problems, but students are also encouraged to find solutions to their problems through internet searches.

[Evaluation methods and policy]

Students are expected to actively participate in class, to reproduce all examples discussed in class, and also to complete regular reports.

Evaluation will be based on the following criteria:

- Assignments (49%) [7 @ 7% each]
- Presentations (21%) [3 @ 7% each]
- Final Project (30%)

TOTAL: 100%

[Textbooks]

No specific textbook will be used. All necessary materials will be distributed electronically and will be discussed in class.

[References, etc.]

（References, etc.）

A number of useful books and internet resources will be discussed for student self-learning.

（Related URL）

www.blender.org(Blender is free-and-open-source 3D modeling software that will be used in all lectures and all assignments.)

[Study outside of class (preparation and review)]

This course has a variety of out-of-class assignments (including a Final Project) and no exam. Students who do not pay attention to the lecture content during class will likely have difficulties completing the assignments.

[Other information (office hours, etc.)]

REASONS FOR CLASS SIZE RESTRICTION:
This class extensively uses Blender (blender.org), which is a powerful and complex software package. Extensive one-on-one student support to understand and handle software problems that arise. A large class size is not feasible.

IN-CLASS ENVIRONMENT
This is a small seminar class, and active discussion is encouraged. Students are encouraged to ask questions, both of the instructor and of fellow students. We are all here to learn, so let's work together to create the

Continue to ILAS Seminar-E2 :Let's create 3D computer animations (三次元アニメーションを作ってみよう) (3)↓↓↓

best results we can!

OFFICE HOURS:
Immediately before / after class or by appointment (pataky.todd.2m @ kyoto-u.ac.jp)

[Essential courses]