Game Science

Syllabus Number

Special Subjects
Elective 1 credit

3D333

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1. Course Description

The main aims of this course are to know the basic knowledge of theory and also practical examples of digital game design, evaluation and application. We will focus on the wide-ranged view of (digital) game science mainly for beginners in this area. However, advanced materials will be presented for further study.

This course relates to DP4M.

2. Course Objectives

Main objective of this course is to know the basic knowledge of game science. Important view is that there have been many attempts to establish theoretical basis for entertainment including digital game.

3. Grading Policy

Little tests and exercises in 2nd to 7th classes (30%)

Report (70%)

The results will be informed and reviewed mainly via LMS.

4. Textbook and Reference

Textbook

Textbook is not used. Handouts will be provided.

Reference

Johan Huizinga ISBN: 978-4062924795 Kodansha Roger Caillois ISBN: 978-4061589209 Kodansha

Hasegawa et al. ISBN: 978-4774194981

Gijutsu-Hyohron Co., Ltd.

Dohmae ISBN: 978-4797376999

SB Creative

Endo ISBN: 978-4797367843 Mobile and Game-Studio Magy Seif El-Nasr et al. ISBN: 978-1447172246 Springer

5. Requirements (Assignments)

For preparation, 45 min are required for each class in standard. You should survey keywords instructed in classes.

For review, 45 min are required for each class in standard. Practice questions in class or distributed paper should be reviewed.

6. Note

LMS will be used for this course.

Requirement of the report will be informed on the 6th class.

7. Schedule

Introduction

 $History\, of\, science\, for\, entertainment$

Development method of digital game

Digital game design

Mathematics and physics for digital game

Game AI #1 (especially, about agent in game)

Game analytics and game AI #2 (especially, about agent in game)

Applied game, gamification

 $Sum \, mary \, of \, this \, course$