GREEN GAME STUDIES
COURSE PACKAGE 3

CGL
Cologne Game Lab

Technology
Arts Sciences
TH Köln

Breda University
OF APPLIED SCIENCES

CHARLES
UNIVERSITY

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OF TURKU

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Course: "Experimental Games for Climate"

Module: Collaborative Projects (B.A. Digital Games Program, Semester 4)
Institution: TH Köln, Cologne Game Lab, Germany
Timeframe: Summer Term 2022 (April 2022-July 2022)

This course package is based on a syllabus of a course delivered in the B.A. Digital Games program within the Media & Game Studies module taught at Cologne Game Lab, TH Köln in summer term 2022. The package includes the following:

- Course description
- Course objectives
- Mandatory sources
- Assessment & Grading criteria: requirements, grading, deliverables
- Course structure

This educational material has been created within the framework of the project "Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies" (2021-2024) funded by the Federal Ministry of Education and Research in Germany *within the framework of the* Erasmus+ Programme of the European Union (KA220-HED – Cooperation Partnerships in Higher Education).

More information may be found at: *https://greeningames.eu*.

Course description

In this course the students will design and develop experimental video games within the context of climate crisis. The goal is to explore the medium of digital games as playable forms of critical thought. To do this, the students will need to consciously evaluate game mechanics, visual and system aesthetic as well as narrative components that best fit the message they want to communicate through the game.

Additionally, the students will a chance to exchange their ideas with **external mentors** from the *International Game Developers Association's Climate Special Interest Group* **(IGDA Climate SIG).** Their newly published ***The Environmental Game Design Playbook*** will serve as support material before embarking on the quest of designing the experimental games. The publication will be the foundation for getting acquainted with design tactics that may help in the design of an ecological game.

Whittle, C., York, T., Escuadra, P.A., Shonkwiler, G., Bille, H., Fayolle, A., McGregor, B., Hayes, S., Knight, F., Wills, A., Chang, A., & Fernández Galeote, D. 2022. *The Environmental Game Design Playbook (Presented by the IGDA Climate Special Interest Group)*. International Game Developers Association.

Course objectives

- To provide the students with critical impulses and creative space to develop experimental games within the context of climate crisis,
- To provide support and mentoring in game design, game programming and game arts,
- To familiarize the students with the collaborative environmental game design work by the IGDA Climate Special Interest Group,
- To give the students an opportunity to present their games to and learn from the external mentors from the IGDA Climate SIG.

Mandatory source

Whittle, C., York, T., Escuadra, P.A., Shonkwiler, G., Bille, H., Fayolle, A., McGregor, B., Hayes, S., Knight, F., Wills, A., Chang, A., & Fernández Galeote, D. 2022. *The Environmental Game Design Playbook (Presented by the IGDA Climate Special Interest Group)*. International Game Developers Association.

Assessment & Grading criteria

Requirements

- All students have to actively participate in the sessions.
- All students have to study and analyze the assigned material in a way that enables them to actively and creatively participate in the course; i.e., developing their own game ideas.
- All students have to complete the final assignment (see formal details below).

Grading

The final project grade for each participant consists of the following subgrades for group work and individual contributions:

Group Grades: 70%

–-> Intermediate Presentation: 10%

Formal criteria: design, structure, time management of presentation
Content criteria: game design, game arts, game informatics, critical reflection on the game, consideration of target audience, originality and relevance with regard to the theme, project plan

––> Final Presentation: 10%

Formal criteria: design, structure, time management of presentation
Content criteria: game design, game arts, game informatics, critical reflection on the game, consideration of target audience, originality and relevance with regard to the theme, reflection on development process including a detailed project plan

––> Game: 50%

Criteria: game design, game arts, game informatics; originality and relevance to the theme "Experimental EcoGames for the Future"

–––> Individual Grade: 30%

Each student has to write at least one blog entry per week documenting their work and contribution to the team project (text, artwork, video, code, prototypes). The individual grade is based on the blog entries listed below.

Game design criteria:
Conceptual originality of the approach, design and application of the core game mechanics, conceptual design of character, objects and game-levels

Game arts criteria:
Process: Transparent and traceable design process.
Design quality (including audio): Does the result show a consistent and discrete design concept? Convincing use of aesthetical approach in regard to the given task?
Technical quality: Appropriate use of tools (analog + digital), details and over all finish.

Game programming criteria:
Conceptual approach to technical realization of the game, quality of the written code (documentation!), functionality of the game prototype

Game studies criteria:
Unity of artistic vision as expressed in the game prototype; quality of analytical, design and artistic self-reflection within the context of selected aspects from the Environmental Game Design Playbook.

A professor/mentor of each specialization will do the individual grading!

Deliverables

One-Pager Pitch (PDF or PPT, max 2 slides)

Your pitch should include the following information:
1. High concept of your game (and its experimental character)
2. Supporting visuals (concepts, images, photos, scribbles)

One Sheet Overview (PDF or PPT, max 2 slides)

A quick overview of your game with the following information (make sure the document looks professional):
1. Title
2. Platform and genre
3. Summary
4. Unique experimental aspects of the game
5. Target group (market)
6. Rough production plan
7. High quality in-game or concept art.
8. Team and contact information

Presentation (PDF or PPT, 10-15 slides)

- Presents your game to the audience
- Provides a guide for presenting a more detailed overview of your game
- Corresponds to the visual theme of the game
- Looks professional
- Reflects the experimental aspect of the game

Your presentation should contain the following:
1. All information provided in the „one sheet overview“
2. An explaination of the game‘s direction
3. A deeper dive into every aspect of the game
4. A deeper dive into the development aspects of the game
5. A selection of 1-5 high quality in-game or concept artworks
6. A few comparable titles
7. The most unique aspects of your game

Game Document: PDF (8-10 pages)

- Professional layout
- Printable and standalone, providing the essentials of the game
- Immersed in the game theme
- Explaining the game's direction
- Covering essential experimental design and feature questions
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The game document should contain the following information:

1. Game overview
2. Game pillars and the features supporting them
3. Unique Selling Points
4. High quality concept and game art.
5. Gameplay example described from the players point of view
6. Team and contact information
7. Specific target audience information

Project Sources

1. Project Source Code
2. Complete Project Assets needed to build/open the project
3. Short Documentation on technical infrastructure used (e.g. game engine used and its version, targeted build platform, programming language, source organization)
4. Submission can also be done by giving access to a project repository (e.g. github)

Playable Prototype / Demo (2-5 minutes of high impact gameplay)

Consider the following:

1. It should demonstrate the best and most impressive part of the game. Do not worry about spoilers!
2. It should be small and polished is better than large and rough
3. It should contain voice and audio recording as well as music
4. Make sure you practice how to play it so that it remains impressive to your potential players!

Standalone Game Build

Consider the following:

1. Your game should be ready to land at the players' hands
2. Small and polished is better than large and rough
3. The game should include all necessary tutorials
4. Test before finishing the project. It needs to stand on its own.
5. Include all necessary installers and needed software in an archive
6. Include install and gameplay instructions in a printable document
7. Include a list of known issues
8. Include contact information for support

Gameplay Video

1. A 1:30 – 2:00 minute-long high impact recording of your game or prototype

Note on Publishing

- If you intend to publish your finished games, please make sure that:
- All group members agree to the publishing of the game,
- All group members are credited in the published game,
- All group members keep access to the content for further use e.g., portfolio work.

Course structure

This course has a time format attuned to the specific needs of the B.A. Digital Games Program at Cologne Game Lab, TH Köln. Each session comprises two 90-minute-long blocks (three full hours). Usually, the course is attended by up to 40 students.

Contents

Session 1: Introduction

Session 2: Pitching

Session 3: Intermediate presentations

Session 4: Final presentations followed by a Games Show

Session 1: Introduction

Task 1: Introducing the theme

The first session is devoted to the introduction of the theme for experimental design, in this case "climate crisis". The students are presented with a task of developing games that have the potential to communicate about climate crisis and potentially change the players' attitudes and behaviors.

Task 2: Introducing the mentors

There are four Cologne Game Lab mentors available throughout the development phase (coordinator: Prof. Dr. Sonia Fizek, game arts lead, game programming lead, game design lead). Additionally, in this course format the students are also benefiting from three external mentors from the **IGDA Climate Special Interest Group** (Hugo Bille, Trevin York and Paula Angela Escuadra).

Task 3: Forming teams

The students are given time to form interdisciplinary teams. Each of the teams needs to have at least one representative of one of the specializations (design, programming, arts). The size of the teams should exceed 3 persons but not go beyond 8.

Session 2: Pitching

Task 1: Pitches

During this session, all the student teams pitch their games. After each presentation, all the mentors give feedback. Also, the student peers are encouraged to ask questions and provide their colleagues with feedback. Usually, there are 8-10 teams formed.

Session 3: Intermediate presentations

Task 1: Presentations

During this session, all the student teams present their current state of the game. The presentations need to cover certain aspects (listed above in the Deliverables and Grading sections).

Session 4: Final presentations followed by a Games Show

Task 1: Presentations

During this session, all the student teams present their final state of the game. The presentations need to cover certain aspects (listed above in the Deliverables and Grading sections).

After the session, in the evening, there is a less formal Games Show, during which all the projects are displayed and made available for gameplay. The external mentors have the chance to play the games and provide the teams with final feedback.

Notes:

This teaching format has been discussed in the following academic publication:

Fizek, S., Fiadotau M, Garda, B. M., Wirman, H. (2023). Teaching environmentally-conscious game design: Lessons and challenges. In *Games: Research and Practice*. ACM Journals (Association for Computing Machinery). ACM Digital Library, ETC Press: https://dl.acm.org/doi/full/10.1145/3583058.

The experimental ecological games were also presented during a panel at the Educators Summit during the Game Developers Conference 2023 in San Francisco.

Fizek, S. (2023). Educators Summit at *Game Developers Conference*, San Francisco, USA. 20.03.-24.03.2023. https://schedule.gdconf.com/speaker/fizek-sonia/68160

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The project "Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies" (2021-2024) supports educators in addressing the interdisciplinary nature of green digital gaming.

More information may be found at: https://greeningames.eu.

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