IASC 4F00
Team-based Practicum in Interactive Media Design and Production
Fall/Winter 2013

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Note: when emailing the instructors or advisor, please put IASC 4F00 in the subject line.

Course Website: http://www.cosc.brocku.ca/~mwinter/Courses/4F00/

COURSE MEETING TIMES:
WEDNESDAY 3 P.M. TO 5 P.M. – PROJECT DEBRIEFING AND PRODUCTION WORK TIME
THURSDAY 11 A.M. TO 2 PM. - PROJECT CHECK IN/CHECK OUT AND PRODUCTION WORK TIME

TH269C SEMINAR ROOM AND TH269B GAME DEVELOPMENT LAB

COURSE DESCRIPTION

Principles and methodologies around interactive design; interface design and information design in relation to the conceptualization, planning and production of an interactive multimedia project taking into account diverse and complementary roles of writing, narrative structure, play mechanics, and the creation and integration of visual and audio elements.
Seminar, lab, 5 hours per week.

COURSE OBJECTIVES

This course will emulate a professional media development studio environment to support the realization of a unique, creative, critically engaged, polished and fully functional interactive media project or game expressed in a single level. Students will collectively conceive and execute the project in all its dimensions during this course. They will organize and function as a production team with each individual providing leadership in specific production role(s) that will contribute in a substantive way to the overall project. Experts from relevant fields will be selected in consultation with students to review the project at various stages in production. The final deliverable in this course will be a polished and functional build of a game or other interactive media expression that:

- consists of original assets
- has at least one novel feature
- is fully tested
- provides an intelligent, engaging and challenging user experience

The finished project will be presented publicly at the end of the course and must be made available online.

Note: See Project Framework and Requirements below for details

Learning Outcomes

Students completing this course will have examined and analyzed current interactive media models featuring aesthetic, social and technological phenomenon. They will have combined their conceptual understanding of this domain with the practical creation of games considering genre, structure, goals, rules, art and design, narrative, plot, characters, play mechanics, environment, interface, and audio. Participants' problem-solving, collaboration and communication abilities will be honed in team-based production. Students completing this course will

- experience the full scope of game design and production
- appreciate the central role of systematic production process
- intensify existing knowledge in technical and other practical aspects of game design and/or development based on individual choice of specialization
- respect collective decision-making and production responsibilities
- value innovation and risk-taking

- test assumptions and production outcomes at all stages of development
- integrate conventions and standards of practice including comprehensive planning, strong communication, and solicitation of and reflection on feedback;
- translate knowledge and intentions into effective oral and written communication;
- reflect on the results of their practice to generate insights and subsequent conceptual and technical options and iterations.

What is Expected of Students

Because this class will function as a production team, absence from class must be kept to a minimum. Students will all depend on each other for the success of the game project. In addition to class meeting hours, students should expect to spend a minimum of an additional 5 hours a week on the course and project. All members to the project team are expected to contribute on a positive and practical level to the team project as detailed in this course outline. Anyone not doing so may be advised to leave the course.

This course is entirely oriented around student-generated production research, planning, organization and creation in support of the collaborative project. The project team will rely on each member to be self-motivated and responsible for work and tasks to which they have committed themselves. Late work will significantly affect the project as a whole and will be reflected in the mark for work each student is responsible. No work is deemed to have been submitted unless if has been added to or updated in the project repository. Students who are not present at the weekly production 'checkin' meeting will not receive a mark for that week.

Students will all be expected to have input into all aspects of the project but each **student will be directly responsible for selected aspects of the game**.

Students must **respect all their fellow team members** with whom they are collaborating on this project. All students will be attentive listeners, communicate clearly and follow through on all commitments. Where there are differences or concerns with others on the team, these should be raised immediately and directly with the relevant person. We do not encourage complaining to others about problems. **Address problems directly** with the party with whom you have issues.

IMPORTANT DATES AND ACTIVITIES

Wednesday, Sept. 4	Classes Begin
Thursday, Sept. 12	Game Concept in place
Monday, Sept. 16	Last date for course change
Thursday, Oct. 10	Design and Technical Document Due
Monday, Oct. 14	Thanksgiving Day
Oct. 15 – 19	Fall Break Week
Wednesday, Oct. 23	Revised DTD Due Project Management Plan and Mechanisms Live Production begins First Check out
Thursday, Oct. 24	First Check in/Check out Check in and Check out to track progress on all project tasks will occur every Thursday at 11 a.m. through to project completion
Wednesday, Nov. 6	Last day for withdrawal from D2 courses without academic penalty
Thursday, Nov. 28	Last class meeting for fall term of IASC 4F00
Tuesday, Dec. 3	Last day of classes
Thursday, Dec. 5	White box Prototype (proof of concept) Due
Dec. 6 - 17	Exams
Monday, Jan. 6	First day of classes for winter term
Wednesday, Jan. 8	First day of class for IASC 4F00
Friday, Jan. 17	Last day for withdrawal from D1 courses without academic penalty

Feb. 17-21	Reading Week
Thursday, Feb. 27	Date by which draft beta version of project should have presented with full assessment of production requirements and testing plan
Friday, Mar. 7	Last day for withdrawal from D3 courses without academic penalty
Thursday, Mar. 13	Date by which Closed Beta version of project will have been tested and reviewed
Thursday, Apr. 3	Last Class for IASC 4F00 Open Beta Due
Monday, Apr. 7	Snow Day
Apr. 8 - 23	Exams
Friday, April 24	Date by which Final Project should have received public unveiling and be available for download

EVALUATION

Game Design and Technical Document - 15% of total mark

based on B) instructors' evaluation of each individual's contribution to document

Draft Due Oct. 10
Final Due Oct. 23

White Box Prototype (with all mechanics developed) - 25% of total mark

20% based on B) instructors' evaluation of project
5% based on A) peer and self-assessment of each individual's contribution to the project

Prototype Due Dec. 5

Closed Beta Version (Level, mechanics and most assets in place for testing) - 10% of total mark

based on A) peer and self-assessment of each individual's contribution to project

Build Due Feb. 27

Open Beta Version - 25% of total mark

20% based on B) instructors' evaluation of project
5% mark based on A) peer and self-assessment of each individual's contribution

Due for professional review – April 3
Due for public event and distribution – TBD before April 24

Individual Production Progress

25% of total mark based on C) instructors' evaluation of individual weekly accomplishment of production goals

Beginning the week of Oct. 23 and extending through April 3 (16 weeks)

Evaluation Methods and Criteria for Assessment

A. Peer & Self-Assessment of individual students work on group project		
Objective/Criteria	Rating	Comments, Examples, Explanations
Group Participation Attendance at meetings, volunteers when needed		
Time Management & Responsibility Accepts fair share of work and reliably completes work in required time		
Adaptability Develops new skills in service to the project, readily accepts changed approach or constructive criticism		
Creativity/Originality Problem-solves when faced with impasses or challenges, originates new ideas, initiates team discussion		
Communications Skills Effective in discussions, good listener, capable presenter, proficient in diagramming, representing and documenting work		
General Team Skills Positive attitude, encourages and motivates team, supports team decisions, helps team reach consensus, helps resolve conflicts in the group		
Technical Skills Ability to create and develop assets on own initiative, produces technical solutions to problems		
Scoring	3 = better than most of the group in this respect 2 = about average for the group in this respect 1 = not as good as most of the group in this respect 0 = no help at all to the group in this respect	

B. Instructor Assessment of Work/Project		
Objective/Criteria	Rating	Comments, Examples, Explanations
Aesthetic Quality Attention to formal properties. Provides a cohesive, affective sensory phenomena (visual, aural, haptic, embodied)		
Creativity/Originality Independent and innovative content & features		
Clarity Theme, story, goals, mechanics, resource management are evident to user; consistency with Design Technical Document & standards of practice		
Critical Engagement Provides alternatives to conventional conventions, methods, & assumptions, demonstrates awareness of theory in the field		
Technical Quality Functions as intended. The concept, scope & technical execution cohere.		
External Review Clarity of intention, scope; creativity & competency of production		
Scoring	3 = exceptional 2 = meets expectations 1 = below expectations	

C. Instructor Assessment of Production Progress		
Objective/Criteria	Weekly Rating	Comments, Examples, Explanations
Task Definition Tasks are appropriately selected, sequenced and broken down into necessary components.		
Task Completion Criteria for completion of all tasks is defined; tasks are completed on time.		
Degree of Difficulty Scope and number of tasks is defined.		
Communication Relationships between tasks are negotiated & established; appropriate consultation and information sharing has taken place; priorities are understood.		
Technical Quality The work is competent and with no errors.		
Scoring	3 = meets full expectations 2 = meets some expectations 1 = below expectations	

INTERACTIVE MEDIA PROJECT: FRAMEWORK AND REQUIREMENTS

The IASC 4F00 project must be a creative; critically-engaged*; formally coherent; sustained and purposeful digital interactive exchange between participants and content. It must have at least one novel feature that is not commonly seen in commercial entertainment media. Content can include real, virtual or a combination of the two. The IASC 4F00 project can be, but is not limited, to a video game. The finished project must be meaningful, affective, polished and complete. A completed project would include, but not be limited to, a clear expression of the following elements:

- Platform
- Scope appropriate to timeframe, team size and capabilities
- User Interface
- Environment/Level & associated rules and objectives
- Narrative (character, plot, setting, events and their relationship to story/meaning)
- Interaction patterns (gameplay) including cut-scenes
- Meta-narrative
- Aesthetic (cohesive and affective sensory content)
- Mechanics (designed and functioning consistent with project objectives)
- Dynamics (sequence and feedback)
- Production Process

It will focus on developing these elements to their fullest extent in a single level.

**Critical engagement is a process of approaching ideas and actions in a questioning manner. It clarifies goals, examines assumptions, discerns hidden values, evaluates evidence and uses this information to shape new intellectual or creative possibilities. Someone who is critically engaged is willing to imagine or remain open to alternative perspectives and is willing to integrate new or revised perspectives into their ways of thinking and acting. A critically-engaged creative project will demonstrate both an understanding of and reflection upon concepts/theories. It will productive challenge existing methods and conventions and pursue the development of innovative structures and forms.*

PRODUCTION ROLES

Producer

Responsible for defining and maintaining project pipeline management process so that game production goals are realistic and consistently set and met and all production information is accessible at all times.

Consults with all team members to:

- Create and maintain a mechanism (Excel or other tool) for project management that inventories and tracks status of all game assets and production milestones.
  - This must include breakdown of stages in workflow for all types of assets
  - It must include criteria for evaluating successful completeness of all assets
- Identify production priorities and major production goals
- Provide status updates and production summaries on a regular basis
- Identify and maintain an orderly file repository and version control system for storage, transfer and access to project assets.

Designer

Responsible for articulating and ensuring coherence in overall game - its concept, features, purpose and flow; seeks to balance story, environment and gameplay;
Responsible for creation and maintenance of Design and Technical Document (in consultation with team)

Consults primarily with Producer, Level Designer, Mechanics Developer, and Narrative Developer, Art and Audio Directors as well as all team members to ensure that the project coheres with the DTD.

- Conceptualizes and articulates overall user experience (for DTD)
- Coordinates production of coherent DTD and revises it as necessary
- Consults with all team members and departments to ensure project coherence
- Vets all features of design, gameplay, interface and world throughout development process

- Collaborates with Level Designer, Mechanics Developer and Narrative Developer in evolution of project
- Develops criteria for testing user response

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Art Director

Responsible for project aesthetic (visual experience)

Consults primarily with the Designer, Narrative Developer, Level Designer and Art team to:

Create Art Direction Bible (for DTD) that includes:

- statement of visual style
- mood board
- colour palette(s)
- visual targeting examples for key assets
- develops criteria for testing user response

Advises on Camera and Lighting

Establishes workflow, asset creation pipeline and priorities in consultation with Art team:

- **Concept Artist**
- **3D Artist - Character and Prop Designer/modeler**
- **Texture Artist**
- **Animator**

  Each of these will take leadership in the creation of a particular type of visual asset. They are each part of the Art Team. Team members may play multiple roles in the Art Team.

Audio Designer

Responsible for all sound elements and their relationship to the game design and project aesthetic

Consults primarily with the Designer, Level Designer, Cinematics Director and Art Director to:

- Create statement of visual style (for DTD)
- Create and implement sounds in game engine
- Record and edit voices
- Place and time audio components (with Level Designer
- Develop criteria for testing user response

Level Designer

Responsible for the game's environment in the game engine

Consults Primarily with Designer, Narrative Developer, Art Director, Mechanics Developer as well as Puzzle and UI developers to:

- Develop concepts, sketches, models, maps (for DTD)
- Lay out, map features, determine environmental conditions, gameplay regions, features and events, and add aesthetic details and cutscenes in level editor
- Develop criteria for testing user response

Mechanics Developer

Responsible for planning and implementing all rules and feedback mechanisms to enable meaningful gameplay

Consults primarily with Designer, Narrative Developer, Level Designer, Puzzle and UI Developers to:

- Determine style and goals for gameplay (for DTD)
- Define core mechanics and dynamics of the project (for DTD)
- Ensures game balance in the development of gameplay systems
- Script and Program, behaviours, progression, achievements, rewards, etc.
- Develop criteria for testing all mechanics

Cinematics or Animatics Director

Responsible for filmic cut scenes and/or animatics that bridge sections of gameplay and advance understanding of the story plot

Consults primarily with Designer, Narrative Developer, Art Director and Audio Director to:

- Plan and storyboard live action and/or animated scenes as necessary to enhance player understanding of story and motivations for DTD.
- Determine production tools, methods, locations and schedules
- Find and direct actors
- Film or animate and edit clips
- Test and revise clips as required for coherence with overall project
- Develop criteria for testing user response

Narrative Developer

Responsible for development of the story elements and plot and all written aspects of the project and their relationship with the design and dynamics of the project

Consults primarily with Designer, Level Designer, Art Director, Audio Director, Cinematics Director, and Mechanics Developer to:

- Devise narrative concept (for DTD)
- Draft and refine plot and narrative
- Draft and refine Game captions and/or dialogue for Cinematics or animatics
- Develop criteria for testing player response
- Write summaries and promotional material (in consultation with Designer)

Puzzles and/or supplemental projects

Responsible for the conceptualization and development of all 2D interactive or AR aspects of the project

Consults primarily with Designer, Art Director, Level Designer, Mechanics Developer and Narrative Developer

- Propose, plan and test puzzle concepts or features for other project supplements (for DTD)
- Design, refine and implement puzzles or supplements
- Develop criteria for testing

Interface Design

Responsible for all 2D interface for interaction and feedback components of the project

Consults primarily with Designer, Art Director, Level Designer and Mechanics Developer

- Propose, design and implement HUD (for DTD)
- Propose, design and implement Titles and tutorials
- Design and implement other graphics including those for promotion

Quality Assurance

Responsible for discovery and documentation of all defects and bugs and for determination that the game is playable and understandable to a user.

Consults primarily with Producer, Designer, Level Designer, and Mechanics Developer

- Develops comprehensive criteria for testing game elements
- Establishes testing methodologies and schedule (for DTD)
- Design and implement formalized Bug Testing
- Design and implement formalized Play Testing
- Recruit testers
- Manage process around reviews by external project reviewers

Marketing

Responsible for planning and executing a campaign for the promotion of the project. Note: the person fulfilling this role must also fulfill a production role such as writing, QA, interface design.

Consults primarily with Producer and Designer as well as the entire team.

- Propose a marketing strategy and schedule (for DTD)
- Plan and develop promotional materials which may include website, posters, videos, social media, etc.
- Plan and coordinate public unveiling
- Ensure that the finished game is publicly available to an audience (e.g. downloadable) at the completion of the project.

PRE-PRODUCTION PROCESS

Concept Development

The group will begin this process with identifying an overarching or high concept that will frame the game. Narrative will drive the detailed development of the project as it will encompass or suggest essential components of the concept, such as:

- Voice (point of view)
- Setting (world)
- Atmosphere (aesthetic and mood)
- Character(s) and characterization
- Conflict (backstory, internal and external)
- Plot (sequence of events, motivation, player challenges and affordances)

The approach and concept will be developed through discussion, possible proposals, negotiations, balloting and compromise to reach final consensus among the group. As the project concept emerges, it will require pre-visualization and testing to ensure that the concept is sound enough to proceed to the next stage in pre-production. Before the concept can be taken to the next stage, it must be fleshed out and interrogated through:

- multiple iterations (in increasingly greater specificity) of concept sketches of characters, mood, settings, tools, etc.
- layouts and maps
- tests of core mechanics

Design and Technical Document (DTD)

The Design and Technical Document is an assembly and coherent expression of the project's concept, features, objectives, scope, dimensions and production processes. The DTD will, in addition to describing the concept and the key features of the project, define the project's target audience and how it improves upon or is unique amongst other available projects. It should also define how the project meets the *Project Framework and Requirements* described above.

The Project Designer will coordinate the production of the DTD and all members of the team will contribute components according to their selected production roles. The DTD must contain a section from each department that articulates in detail all aspects of the work they plan to do. The drafts from each department will be submitted to the designer and s/he will craft the DTD into a whole.

The project team will therefore define all components and each section of DTD must thoroughly outline rules, goals, features, mechanics, puzzles, assets, process and all other elements that will be undertaken in support of the project and articulate how these will contribute to the essential nature/purpose of the game.

The DTD will be submitted to instructors for review Oct. 10. It will then be revised by the team and sent to external reviewers. Based on this feedback, the DTD will be revised once more before it becomes the definitive guide for creation and criteria for evaluation of the project. The completed DTD will be made available to all team members who shall refer to it when there are questions about any aspect of the game.

The DTD is a living document and, as the project evolves, this document should be maintained and kept consistent with any revisions to project goals so as to enable the team to use the DTD to guide production. At minimum, revisions to the DTD should be made after white box build and after the closed beta version is tested. All changes to the project concept, features, scope and therefore to the DTD must have full agreement of the team.

PRODUCTION PROCESS

The Producer and Production Process

The Producer has overall responsibility for maintaining the project on track. This means establishing mutually agreeable milestones and production targets as well as selecting and implementing

- process pipeline for protocols, sequence and methods of production
- project management system to ensure all tasks and assets are systematically tracked in real time.

The Producer, with the cooperation of all team members, will be expected to account for the prioritization and status of all work on the project.

The Producer will set up a repository, directory system and file naming protocol to enable team members to transfer all current work-in-progress and versioned assets and documents (for production check in) into the project. This will support the presentation of work for weekly check in. A clear pipeline for project development will identify and deliver appropriate and/or completed assets for the game engine. No task will be considered complete until it meets the criteria set by the creator and producer. While there are many steps in the pipeline associated with production areas such as modeling, the ultimate test of completeness is implementation in the game. Ensuring that there is clear understanding of the status of each asset in the pipeline requires discipline and planning - as each team member must find time to appropriately name and transfer files and update status documents as required by the producer. An external drive is available to the class for the all necessary back-up of project files.

Project Management System

The Producer will, in consultation with the team, research, devise and present a model/format for Project Management System to the team. After it is fully agreed upon, Producer will communicate to the team in full detail what is required from individuals on the team to keep this document up to date at all times.

The system will be presented to the team in early October and must be implemented live (ready for use) by Oct. 23.

> In the past Project Management has been done with an Excel spreadsheet with tabs for each department that is accessible and editable online or with a paper-based Agile development process. Whatever system is selected, it must be capable of providing detailed specifics of the requirements of each task/asset and record its status on the way toward completion (e.g. mesh, materials, binding, animation, critique, upload, implemented in engine, tested, complete).

The Production Tracking process will form the core of the team's weekly check in/check out process. All "work-in-progress" asset and task goals should be evident in the document each week and the successful accomplishment of in-process work will be accurately recorded there and reviewed by the group and the producer so that new weekly goals can be set.

Weekly marks for individual progress will be based on records in the tracking system and attendance in class to report on work in process.

It is the joint responsibility of the producer and each member of the team to ensure that the production tracking information is constantly updated to reflect the actual status of all task goals and assets. The quality of the project, as well as each student's mark, depends upon it.

Weekly production meetings

> **Weekly Project Debrief – focus on issues, priorities and shared communication that effect the project overall.**
>
> **Each Wednesday**, the team will discuss and evaluate the project as a whole and will address any issues around the realization of the project that are emerging. Team members shall present concepts, sketches, maps, models, mechanics, etc. for feedback from the team. They will bring forward any opportunities they see to adjust the production in their areas of expertise and they will address any problems, need for clarification, conflicts, impediments, etc. that impact the whole project. This is part of the creative process. This Debrief can also be seen as a form of critique in which the team examines assumptions, explores context in greater depth and seeks to strengthen the project.
>
> **Check in/Check out Process**
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> When production commences in October the team will meet at on **Thursdays** to prioritize and distribute work and to affirm that tasks already specified and assigned have been completed. In this way, the project will be kept on track.
>
> The detail as to how this works is as follows:

- Upon review of the up-to-date Project Management Document (that tracks all assets, tasks and upcoming milestone goals), the team members and Producer will determine what tasks are necessary to complete for the coming week.
- **"check out"** = a process by which each team member, in consultation with the Producer and team, identifies the precise tasks they plan to undertake during the coming week. The formal check out process will allow for regular update to the project management system.
- Students are advised to keep their own independent written record or log of the weekly tasks to which they have committed for their portfolio
- Team members will ensure that the project management system is accurate in its record of their tasks so that, at a glance, the Producer and instructors will know what work is underway.
- **"check in"**= affirming the completion of the "checked out" work tasks in the project management system and reporting to the group on their work.
- Reporting on work completed will take the form of showing that work wherever possible. Evidence of all work should be available in the project repository and be shown the group as necessary. Work will not be checked in unless the person responsible for it is present at the check in meeting.
- Completed work tasks that are not recorded in the project management system or that do not reside in the project repository is not considered "done".

WHITE BOX PROTOTYPE (PROOF OF CONCEPT)

By the end of the first term the project shall be presented as a playable "white box" prototype. It will demonstrate:

- core mechanics of the project will be operational,
- level laid out, mapped, scaled, with triggers
- all assets (models, props, sounds, dialogue) represented as simple draft placeholders
- basic HUD in place
- matinees, cinematics presented as captioned storyboard or text sequence
- puzzles, supplements as draft placeholders

The result will provide a player with the opportunity to play through the game, with all its features present. The player must be able, by interacting with the prototype, to comprehend the story and understand and achieve the game goals. It must be possible to assess the prototype for bugs in the mechanics as well as for quality of play. This build will be reviewed by industry professionals.

CLOSED BETA VERSION FOR TESTING

By Feb. 27, the game should be developed to the stage where it can be evaluated for remaining production requirements. A comprehensive plan for testing the game will also be established by that date. A complete Closed Beta build shall have been tested by March 13. The primarily focus of testing will be on the mechanics but testing must also also capture information about the players overall experience and comprehension of the project's purpose.

This means the closed beta version of the game has:

- Core mechanics refined and optimized
- Level representative of the game's aesthetic with attention to scale, most materials, props and all triggers
- Characters are fully developed
- HUD complete
- Titles, instructions, captions in place
- audio themes, dialogue recorded and added,
- Puzzles and supplements developed
- Matinees and cinematics (including voice) developed

OPEN BETA PRODUCTION AND FINISHED GAME

Immediately following the closed beta testing, the project team is expected to
Analyze results of testing
Develop plan for fixes and improvements (recorded in DTD)
Fine tune and polish

- level layout, lighting and triggers
- sharpen the mechanics
- interfaces and mechanics of puzzles or supplements
- visual and other properties all assets
- credits
- revisions to any captions, dialogue
- re-writing, re-recording and re-editing of cinematics
- fly-through and/or promotional animatic.

See the Project Framework and Requirement listed above for more detail on what constitutes a finished production.

The team will negotiate a date for the final reveal of the project. This public event to which industry, academic and fellow students are invited should occur before April 24. The team will give a formal presentation of the game describing its premise, context and production process. The game must be available to the audience for some to play and others to observe the gameplay. The game must be available at this time for download.

PROMOTION AND MARKETING

The team is encouraged to promote the project by whatever means are at their disposal. A website and social media promotion have, in the past, been successfully leveraged to build awareness of and showcase the project. IASC 4F00 projects have also negotiated promotion through Brock TV and BUSU. While members of the team will contribute to this activity, the focus of the course is on conceptualization and production of the project itself. Only one person from the team will be designated to work in this area.