Lecture Material: For this introductory offering, I developed 21 new lectures including slides and in-class activities to give students hands on experience with techniques being taught. The material for these lectures was drawn from a combination of game-specific design material and core software engineering practices. The general approach that I followed when developing the course was to provide a game-specific lecture drawing from various game design experts followed by a lecture general software development practices. The overlap between the associated lectures served to draw on students' knowledge of games, introduce them to software practices and reinforce the material and techniques being introduced.

Assignments: Assignments were set up to facilitate a project driven, group-based course culminating with group game demonstrations. Students were required to create multiple prototypes of varying fidelity and finally creating a playable game in *GameMaker Studio*. The physical prototypes introduced them to techniques for experimenting with design. Each prototype was evaluated with a technique covered in lecture. The choice of GameMaker as a programming environment was motivated by its drag-and-drop coding interface that was amenable to those without programming experience in the class.

While the group-based game was historically part of this course, I developed milestone driven agenda to help students stay on target for completion of a game. The term-long project was comprised of 12 milestones throughout the term serving to keep students on track and allowed TAs to identify groups that were struggling. Four of the twelve milestones required individual submissions.

To give the game development process a real-world field, students were asked to market their game as if they were selling it to gamers or to a game company. Guest lecturers from local game studios as well as UVic's Innovation Centre for Entrepreneurs were brought in to talk to students both about working for a game company and about the challenges of entrepreneurial endeavors. The group final presentations were required to include a video prototype that would not only demonstrate their game but would serve to market it in the form of a trailer.

An outline of the project milestones along with an indication of whether it was a group or individual component is provided here:

- 1 - team selection (team)
- 2 - game analysis (individual)
- 3 - game analysis/comparison (individual)
- 4 - prototype (team)
- 5 - design document (team)
- 6 - computational prototype (team)
- 7 - progress update (team)
- 8 - play-testable version
- 9 - evaluation (individual)
- 10 - final game + manual (team)
- 11 - report (individual)
- 12 - presentation (team)

Labs: Lab time served to ensure groups had at least one hour per week together. During this time, they worked on aspects of their games with the support of TAs. This time was also used as valuable evaluation time of which there were multiple learning benefits: 1) allowed students to experience evaluation techniques first hand, 2) allowed groups to get feedback on their games and 3) allowed groups to see what other groups' progress and in turn motivated their own progress.

Exams: The course had two midterms held at the middle and end of the course and tested students on both game-based design aspects and software development practices.