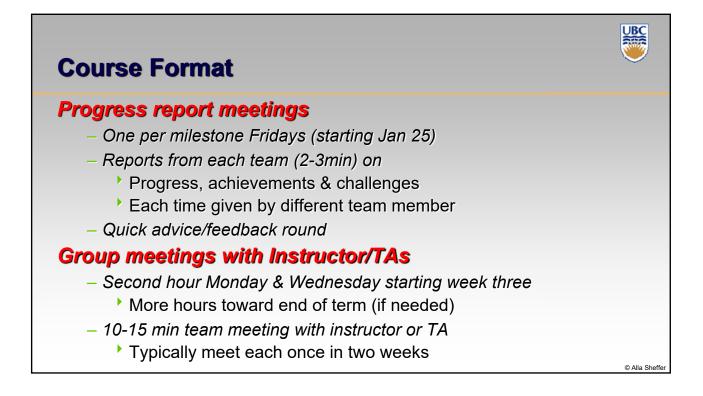
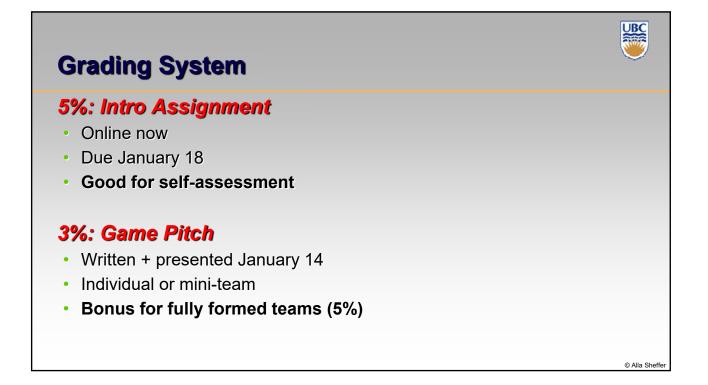
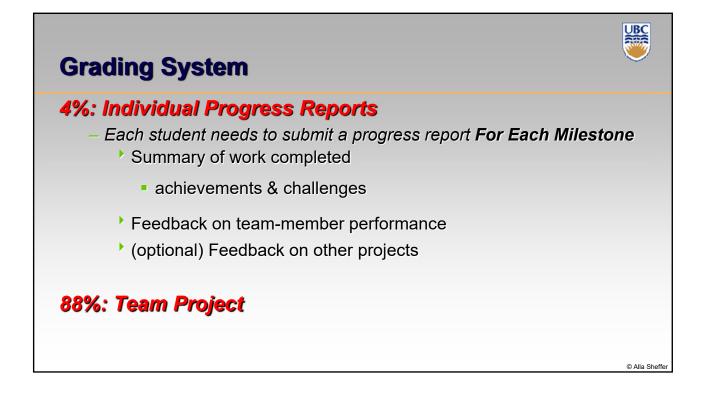
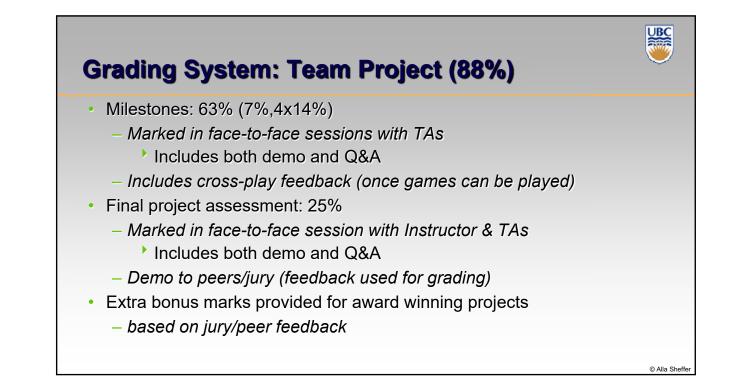


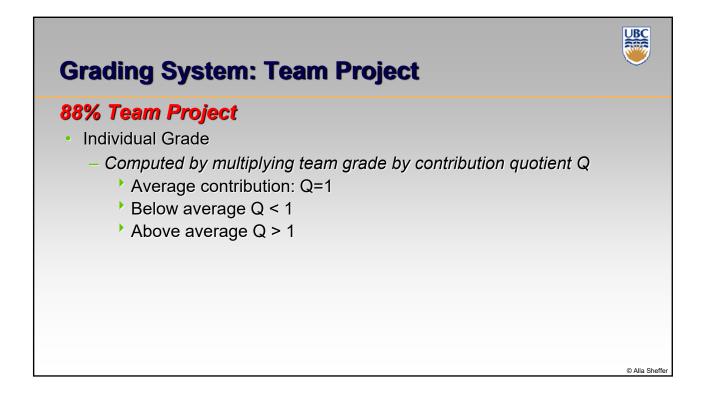
Course Format	BC
Course Hours:	
 Lecture: Monday, 15PM-16PM; Friday 15PM-17PM, DMP 301 	
 Tutorial: Monday 16-17 DMP 301 (first three weeks - everyone) Wed 16- 17 (starting late January, rotating schedule) 	-
Format:	
 Regular lectures by instructor/industry speakers 	
 Team progress report meetings (one per milestone) 	
– Fridays (starting Jan 25)	
 Tutorials: (mostly) team meetings with Instructor/TAs 	
 All team members must be present 	
© /	Alla Shef

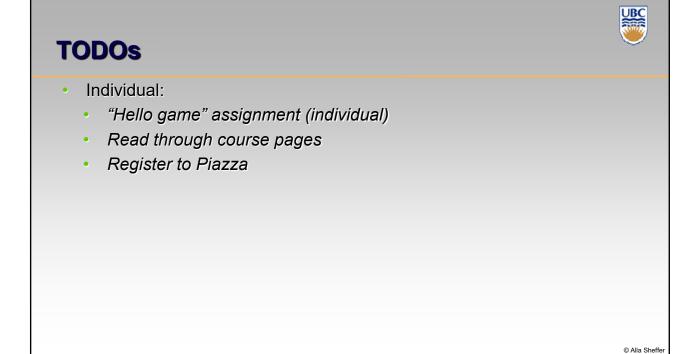


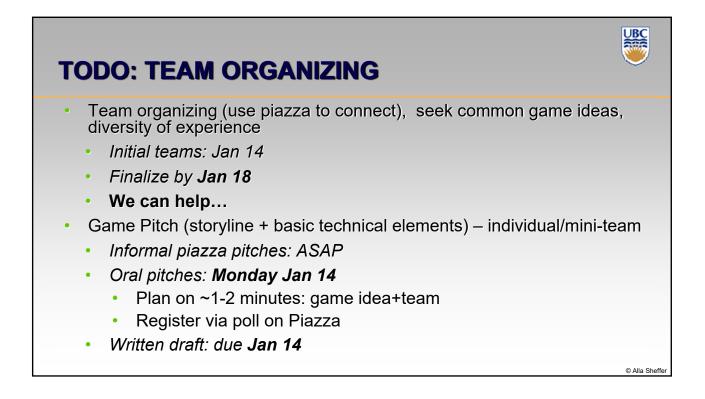












Syllabus (I)

Graphics: Rendering

- · Basic Rendering: Rendering pipeline elements
- OpenGL/Event Driven Programming/Keyboard & Mouse input

Graphics: Geometry

- 2D Transformations
- Curves (in time & space)
- Meshes/Polygons

Syllabus (II)

Basic Software Management

- Version control (how & why)
- Debugging strategies and tools

Copyright: Alla Sheffer

UBC

© Alla Shet

© Alla Sheffe

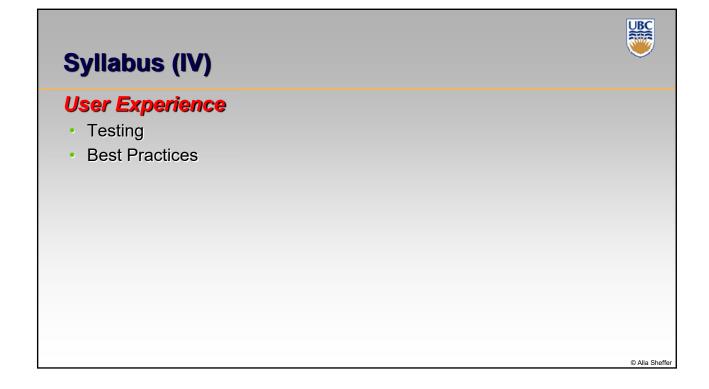
Syllabus (III)

Gameplay Logic/Al

- State representation
- Decision Trees
- Pathfinding (goal optimization)
- Heuristic pathfinding/A*/MinMax

Game UI/UX

- Basics of User Interface Design
- Game interfaces/Game experience





© Alla Sheff

Syllabus (V)

Basic Physics

- Time stepping
- Euler integration
- Velocity & acceleration
- Particles & springs

Collision detection

Syllabus (VI)

Efficiency/Tools

- Profiling
- (In)efficient coding 101
- Compiler optimization
- Memory allocation
- Multi-threading







© Alla Sheff

