

Programming 2											
	1	2	3	4	5	6	7	Spring	8	9	10
Topics	std::vector / transformations	Classes static const	Class relations / Inheritance	Polymorphism	Operator overloading	Stack objects Copy semantics Rule of Three	Move semantics: Rule of Five	3 weeks no classes	Streams	Templates / sequence containers	associative containers
Theory	nothing	composition this ptr, static const	Theory: composition, aggregations association and inheritance protected, ctor, dtor,	Theory: Polymorphism, virtual dtor and final, override specifier. Array of base class pointers.  pointer typecasting, static, dynamic and reinterpret, const. typeid RTTI	Operator overloading	Stack vs heap objects With inheritance References Bit of slicing	copy ctor, copy assignment, generated or explicit, marking as = delete or = default. Know which one is called when. Moving and inheritance, slicing problem.	Milestone game project	text i/o (not bin)iostream, read, write, typedef vs using(C++11), RAII, getline, stringstream, more std::string functions, string formatting	Theorie: intro templates, vector, list, deque, array	map, set and variations  range based for loop
Lab	Intro Classes Framework Texture class demo with OpenGL transforms. std::vector class UML state machine (traffic light). Rotating cards.	ctor delegation Container class Smileys ShooterGame Texture Manager	shapes Raycast	shapes + soldiers	Container class [] operator Vector2f, Matrices, dot product, transformations Vertex transformations Diffuse lighting Rotating Diamonds Mouse screen to work space	Container class Tower of Hanoi	Container class		Shapes from file Parse svg format std::string exercises: Wheel of fortune	Lab: Mouse trail (deque) container class linked list initializer lists	STL containers Resource Manager
MiniGame	Powerup class (rotating image pickup) with std::vector	PowerUp Manager class	Level + Avatar + Raycast + gravity + camera	avatar sprite sheet, svg, camera collision handling	Platform End of game HUD Sound	Platform End of game HUD Sound Apply copy semantics to minigame	Apply move semantics to minigame		Apply copy/move semantics and feedback	HUD / Sound	debug/polish code
Game Project		Intro Game Project Choose gameplay	Upload gameplay video Feedback on choice	Spritesheets Avatar	Level	animations	interactions				

11
debug/polish code