Junior Phase Outline

Week	Workshop/Checkpoint	Topics
1	**Data Structures Review Checkpoint (Take-home)**	—
	Data Structures and Abstract Data Types	Stack, Queue, Linked List, Binary Tree
	Intro to Boxing, Landing Page Liftoff	HTML, CSS
	Collaboration	Pairing, Git, Debugging, Unconscious Bias
	Selector, Pixelate	DOM, Event Listeners
	Game of Life	DOM, Async, HTML, CSS, Git, Fun
	CS Saturday: Compilers	Tokenizing, LALR(1) Parsing, Generating
2	**Express Review Checkpoint (Take-home)**	—
	Algorithms and Algorithm Analysis	Bubble Sort, Merge Sort, Big O Notation
	NodeShell, WizardNews I	Node.js Modules, Async, Express Basics
	Intro to Databases & PostgreSQL	Databases, SQL, Schema Design
	WizardNews II & III	Async-Await, Express Routing
	Wikistack	ORMs, Sequelize, Web Apps
	CS Saturday: FQL	Query Languages, FP, Declarative Code
3	**Sequelize Review Checkpoint (Take-home)**	—
	Counterintelligence, Plantr	Promise Mechanics, Seeding
	Wikistack II, Trip Planner I	Client-Server Architecture, Webpack
	Trip Planner II	SPA, AJAX, ES Modules
	ContactList, Juke	React Intro, React Component Lifecycle
	Juke (continued)	Full-Stack Web Apps
	CS Saturday: Machine Learning	AI
4	**Pillars Checkpoint,** Tessel Hackathon	**Express, Sequelize, React**
	React Review Checkpoint (Take-home)	—
	TDD Katas, Side Effects, Testing Puppybook	Testing, Test-Driven-Development, Spies
	Readium	React-Router
	Todo List	Forms in React
	World Wide Whiteboard	Websockets, Socket.io
	CS Saturday: AlgoExpert	Algorithms
5	**Redux Checkpoint (Take-Home)**	—
	Jamda, ImmutableList	Functional Programming, Immutability
	Wizard Quiz	React Design Patterns
	XOXO	Redux, Redux Middleware
	Grocery List, StackChat	React-Redux, Thunks
	StackChat (continued)	Realtime Stateful Full-Stack Web Apps
	CS Saturday: Security	Security
6	Redux Rounding Out, Login/Logout	Sessions, Authentication, Deployment
	OAuth, Defense Against the Dark Arts	Passport.js, Security
	Curriculum Review	Everything
	Senior Enrichment Project	Full-Stack Web Apps
7	**Senior Phase Checkpoint**	**Topics to study**

* Please note that this is a tentative schedule that is subject to change.