New Horizons Regional Education Centers (C&T)

Pacing Guide (Fall 2020)

Program: Programming (6640)   **Teacher: Sridhar Chinnabhandar**

1st/ 2nd Quarters Topic/Unit	Virginia State Competencies	MTA Java Certification	Supporting Equipment Technology
What is programming? **Java 6 Certification** **TNCC: 14 ITP credits**	-	-	Lecture/Web page/Computer
Programming Development Environment for Java **The First Java Program** **Primitive Variables** **Arithmetic and Relational Operators** **User Input** **Syntax Errors** **Executable Files**	39-49, 61	Understand Java Fundamentals Work with variables, data types and expressions	Lecture/Web page/Computer
Decision Statements **Loops – single and nested** **Formatted Output**	52, 54-55, 58-60	Implement Flow Control	Lecture/Web page/Computer
Using web resources for programming	77-78	String, StringBuilder , ArrayList APIs	Lecture/Web page/Computer
The Software Industry **Attributes of a professional programmer** **Internet Security**	1-29, 33, 85,86, 88, 90	-	Lecture/Web page/Computer
Methods	53, 57	Work with variables, data types and expressions	Lecture/Web page/Computer

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Arrays	56	Work with variables, data types and expressions	Lecture/Web page/Computer
String Processing in Java		Work with variables, data types and expressions	Lecture/Web page/Computer
Object-oriented Programming	62	Perform object-oriented programming	Lecture/Web page/Computer
Software Development Industry Trends Programming Languages and Operating Systems	34-37	-	Lecture/Web page/Computer
Graphical User Interface (GUI)	50, 51	-	Lecture/Web page/Computer
Web page design with JavaScript/html	79-80	-	Lecture/Web page/Computer
MTA Java Programming Certification Review	81-84	MTA Java Programming Certification	Lecture/Web page/Computer
Introduction to Game Programming (Game Maker)	63-76	-	Lecture/Web page/Computer
Exception Handling	-	Compile and Debug Code	Lecture/Web page/Computer
File Read/Write Operations	30-32	-	Lecture/Web page/Computer
Software Development Lifecycle	38	-	Lecture/Web page/Computer

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Software Professional Portfolio (GitHub) Diversity and underrepresentation in IT		-	
2020 Great Computer Challenge at ODU	30-32	-	Prep Sessions/Web page/Computer