# COMPUTER SCIENCE Professional Learning Opportunities

**Oracle Academy** leverages Oracle's global technology leadership to offer a rich portfolio of free computer science education resources to schools. Our long-term goal is to support teacher and student success to create the inventors, innovators, entrepreneurs, and leaders of the future.



To support continuous computer science learning at all levels, we make available a variety of resources that can be used in the classroom including educator training, curriculum, and technology. Educators keep pace with current technology through ongoing professional development. All courses are Virtual Instructor Led Training.

Course Schedule	Days of the Week	Time	Start Date	End Date	Face-to-Face Follow Up Date
JAVA Foundations	M/W	6 PM-7:30 PM	1/9/17	2/20/17	7/18/17
JAVA Foundations	T/R	6 PM-7:30 PM	1/10/17	2/21/17	7/19/17
JAVA Foundations	T/R	6 PM-7:30 PM	1/31/17	3/14/17	7/20/17
JAVA Foundations	M/W	6 PM-7:30 PM	2/6/17	3/20/17	7/21/17
Database Foundations	M/W	6 PM-7:30 PM	1/9/17	2/20/17	7/18/17
Database Foundations	T/R	6 PM-7:30 PM	2/7/17	3/21/17	7/19/17
Getting Started with JAVA Using Alice	T/R	6 PM-7:30 PM	1/10/17	1/31/17	2/4/17
Getting Started with JAVA Using Alice	M/W	6 PM-7:30 PM	2/6/17	2/27/17	3/4/17

**NOTE:** Face-to-Face follow up meetings in July will be held at the Virginia Department of Education. 101 N. 14th Street, James Monroe Building, Richmond, VA 23219. Room location will be emailed prior to the date of the meeting. Face-to-Face follow up meetings in February and March will be held in either the Fredericksburg or Richmond area. The exact location will be determined closer to the date and emailed to participants.

### Interest Surveys are due by November 28th, 2016.

Participants will be emailed their acceptance status by December 2, 2016. Click here to access the **Interest Survey.** 

## **Course Content Descriptions**

#### **Database Foundations: Overview**

This course introduces students to basic relational database concepts. The course teaches students relational database terminology, as well as data modeling concepts, building Entity Relationship Diagrams (ERDs), and mapping ERDs. Oracle SQL Developer Data Modeler is utilized to build ERDs and The Structured Query Language (SQL) is used to interact with a relational database and manipulate date within the database. Oracle Application Express is utilized to provide practical, hands-on, engaging activities. Leveraging project-based learning techniques, students will create and work with projects which challenge them to design, implement, and demonstrate a database solution for a business or organization.

**DESIGNED FOR HIGH SCHOOL TEACHERS** 

#### **Java Foundations: Overview**

This course of study engages students with little programming experience. Students are introduced to object-oriented concepts, terminology, and syntax, and the steps required to create basic Java programs using hands-on, engaging activities. Students will learn the concepts of Java programming, design object-oriented applications with Java and create Java programs using hands-on, engaging activities.

**DESIGNED FOR HIGH SCHOOL TEACHERS** 

# Getting Started with Java Using Alice: Overview

This workshop is designed for students with little or no programming experience and teaches basic Java programming concepts through developing 3-D Animations in Alice 3.1. Alice is a free, educational, introductory Java development environment created at Carnegie Mellon University. Students will have fun creating animated stories and games using objects and characters from a rich gallery of 3-D models.

**DESIGNED FOR MIDDLE and HIGH SCHOOL TEACHERS**