Course: Capstone Course

Course Description:
Welcome to the Capstone Course “Critical Thinking and Problem Solving”. This is the final course in the program Caribbean School of Data (CSOD) INTRODUCTORY program that seeks to empower young adults with the practical skills for today’s Digital economy. The courses delivered throughout this Program were designed to address specific skills profiles considered relevant to the global online job market. This Capstone course provides an opportunity for students to reinforce and apply the knowledge and skills gained from the previous four courses to real-word business scenarios, based on the requirements of prevalent online job prospects.

This course is broken down into 4 (four) modules namely:
1. Business Scenario #1: SEO Clerk + Online Ads Monitor
2. Business Scenario #2: Mobile / Web App Tester
3. Business Scenario #3: Data Processor / Market Researcher
4. Content Creators: Build Your Own Blog Website

Purpose of the Course:
Digital Literacy goes beyond the skills and ability to utilize and manipulate digital tools, and includes transversal skills such as critical thinking and problem solving and understanding how to apply a digital skill-set and tools to real-world business scenarios. This Capstone course provides an opportunity for students to demonstrate the knowledge and skills gained from the previous four courses to real-word business scenarios, based on the requirements of prevalent online job prospects. Students also learn to use effective communication and collaborative techniques in tackling assigned business challenges.

Learning Objectives:
1. Assess a real-world problem situation and business needs to identify, evaluate and select appropriate digital tools and possible technological responses to solve them.
2. Demonstrate the effective application and use of digital tools to a given business scenario.
3. Use digital tools and technologies for collaborative processes and to share data, information and digital content with others.
4. Create and edit digital content in different formats, in order to share and communicate applied solutions.

Target Audience:
The course is targeted to young adults who have reached the end of high school and/or are beginning to engage in tertiary education, and who have none-to-basic starting digital competencies.

Pedagogical Approach:
Course content has been developed to target young adults who have reached the end of high school and/or are beginning to engage in tertiary education, and who have none-to-basic starting digital competencies.

Content design employs the following pedagogical strategies, suitable for adult learners and amenable to online delivery using web/mobile devices:

- **Adult Learners**: allow for student agency and autonomy; being goal-oriented; heavily practical content and; structured to leverage the learner’s experience as well as the local community;

- **Retrieval learning**: Short, modular content with built-in quizzes and repetitive learner assessment in line with content;

- **Alignment**: Module Content has been organized in a logical sequence with clear linkages and alignment to explicit learning objectives

- **Mastery learning**: Modules strive for a progressive, self-paced, directed learning path that allows students to achieve incremental mastery of concepts before moving on to the next

- **Enhanced attention and focus**: Incorporates text and graphical components to create rich, interactive and a much more responsive learner experience

- **Self-Reflection**: Modules provide guides that encourage the student to reflect on the learned concepts and cognitively apply them to familiar contexts

**Time Required:**

Estimated time to complete each module ranges from 45 – 90 minutes. Additional learning resources are provided to enable students to explore more information on the topics covered.

**Programme/Course Assessment:**

The assessment done at the course level is based on both formative and summative assessments, and includes:

1. Progressive in-course Assessment (i.e. questions built-into modules)
   - ~ 5-7 questions per module that help students to test and validate their learning and reinforce the concepts

2. Hands-on exercises
   - A series of exercises that require students to apply learned concepts, tools and techniques from previous courses

3. Reflection Questions
   - A series of 1 - 2 short answer, open ended questions that encourage the student to reflect on the learned concepts and cognitively apply them to familiar contexts
Module Outlines:
Below is a brief description, a list of learning objectives and topics for each module of this course:

Module 1: Business Scenario #1: SEO Clerk + Online Ads Monitor

Module Description:

This module uses a fictional scenario to reinforce skills, techniques, tools and procedures associated with the online job role of "SEO Clerk + Online Ad Monitor". The student is presented with a business scenario and a series of questions and tasks that they are required to carry out as they go through the scenario.

Learning Outcomes:

By the end of the module students will be able to:

1. Assess a problem situation and business needs and select the appropriate digital tools and approaches to solve them.
2. Demonstrate the effective application and use of various social media platforms applied to Search Engine Optimization (SEO) tasks
3. Demonstrate the use of digital productivity tools for collaboration and communication and to share data, information and digital content with others

Module Topics:

1. Scenario Background: Lisa gets a Job at GISEO
2. Her First Assignment
3. Exercise 1: Advising Lisa on Internet device security and Data Governance
4. Day 1: Website Promotion and Likes
5. Exercise 2: Advising Lisa on good online work practices
6. Exercise 3: Website Promotion and Likes
7. Day 2: Keyword Research and Google+ SEO
8. Day 3: Online AD Monitoring
9. Lisa’s Evaluation
Module 2: Business Scenario #2: Mobile / Web App Tester

Module Description:

This module uses a fictional scenario to reinforce skills, techniques, tools and procedures associated with the online job role of "Mobile/Web App Tester". The student is presented with a business scenario and a series of questions and tasks that they are required to carry out as they go through the scenario.

Learning Outcomes:

By the end of the module students will be able to:

1. Assess a problem situation and business needs and select the appropriate digital tools and approaches to solve them.
2. Demonstrate the ability to download, install and evaluate various mobile and web applications
3. Demonstrate the effective use of digital productivity tools for collaboration and communication and to share data, information and digital content with other

Module Topics:

1. Scenario Background: Junior needs a Job
2. Tech Caribbean is hiring - Junior gets the job as a mobile/web tester
3. Beach Party at Fort Clarence?
4. Guidelines for Professional Telephone Communications
5. Day 1: Testing Mobile Apps
7. Day 2: Testing Web Applications
8. Exercise 2: Testing Web Apps
9. Assessing Junior’s Performance
Module 3: Business Scenario #3: Data Processor / Market Researcher

Module Description:

This module uses a fictional scenario to reinforce skills, techniques, tools and procedures associated with the online job role of “Data Processor / Market Researcher”. The student is presented with a business scenario and a series of questions and tasks that they are required to carry out as they go through the scenario.

Learning Outcomes:

By the end of this module students will be able to:

1. Assess a problem situation and business needs and select the appropriate digital tools and approaches to solve them.
2. Demonstrate the effective application and use of various productivity tools applied to Data analysis and local Market research activities
3. Demonstrate the effective use of digital productivity tools for collaboration and communication and to share data, information and digital content with others

Module Topics:

1. Scenario Background: Yvette needs a job
2. Yvette Finds a Mentor
3. Yvette’s First Assignment
4. Exercise 1: Assisting Yvette with the Spreadsheet Analysis & Presentation
5. Yvette conducts a Survey
6. Guidelines for Email Survey Invitations
7. Exercise 2: Conducting Primary Data Collection with Yvette
Module 4: Content Creators: Build Your Own Blog Website

Module Description:
The ability to create and edit digital content in different formats, and to express oneself through digital means is one of the core Digital competencies. Building Your Own Website is about learning how to be content creators, and not just mere consumers. A personal blog website is a great way to share and tell their story.

Learning Outcomes:
By the end of this module students will be able to:
1. Have greater awareness and aptitude for the skills needed to create a website using a Content Management System (WordPress)
2. Create their own website using a Website Builder (Google Sites)
3. Demonstrate increased technical skills needed for web development
4. Possess increased self-confidence to use digital technology

Module Topics:
1. Becoming a Content Creator
2. Website Concepts
3. What is a Content Management System (CMS)?
4. WordPress 101
5. WordPress Components
6. Google Sites – An Easy-to-use Site Builder
7. Exercise: Setting Up Your First Blog Website
8. Writing a Great Blogpost

Conclusion:
This course consists of 4 modules which, when done successfully, ensures the young adult learners are equipped with the practical knowledge and skills for today's Digital economy. Students get an opportunity to reinforce and apply the knowledge and skills gained from the previous four courses to real-word business scenarios, based on the requirements of prevalent online job prospects.