

## **Syllabus**

### **GENERAL INFORMATION**

Course Title: Smartphone & Tablet Repair

Code: LCNS1040

Contact Hours: 56.25 Hours

Academic Term: January 26, 2021 – March 30, 2021

Professor: Joel Vargas Ramos E-Mail: jvargas@passwordpr.com

### COURSE DESCRIPTION

This course discusses the knowledge and skills that you will need to diagnose and repair broken cell phones including: how to learn to correctly disassemble cell phones, diagnosing a problem, screen repair, micro soldering, circuits theory and business concepts in the smartphone repair market.

### **OBJECTIVES**

This course will take you through various popular cell phones in the market these days. Starting with the disassembly of the cell phones, by smartphone theory and through practice, the student will gain the technical expertise in disassembling and reassembling cell phones. With these basics mastered, the course will teach you how to diagnose a phone through the process of elimination, to efficiently and effectively repair the cell phone in the least amount of time and effort.

- 1. Diagnose Issues with defective cell phones
- 2. Identify the Solution for issues found during diagnosis
- 3. Disassemble and Reassemble most cell phones
- 4. Replace micro components
- 5. Fix broken screens on cell phones
- 6. Understand some of the circuits theory related to cell phones
- 7. Understand the business aspect of the cell phone repair industry



### THEMATIC CONTENT

The following concepts and operations are discussed below:

# I. Smartphone Hardware

- a. Safety
- b. Tools of trade
- c. Identification of micro parts
- d. Disassemble
- e. Front screen repair
- f. Micro soldering
- g. Troubleshooting process

# II. Smartphone Software

- a. Considerations of Installation of operative systems
- b. Android Devices
- c. IOS Devices
- d. Downgrades
- e. Upgrades

# III. Smartphones business concepts

- a. Considerations to start a smartphone repair Business
- b. Permits and laws
- c. Service charges
- d. Service warranties
- e. Client service

### **Laboratories:**

- Lab 1- Mobile Hardware and OS
- Lab 2- Repair Tools
- Lab 3- Soldering Process
- Lab 4- Security Mobile Device
- Lab 5- Multimeter Management

### **Homework Labs:**

- Homework LAB 1- Intro to Mobile Devices
- Homework LAB 2- Smartphones Display Screen
- Homework LAB 3- Fault Detection

PO Box 5000-462 14 Calle Carro Suite 2 San Germán, PR 00683 www.passwordtech.org Tel. (787) 892-7947



## **EVALUATION CRITERIA**

CRITERIA	Grade total
Lab 1-3	100
Lab 4-5	100
Homeworks Lab 1-3	100
Attendance	100
Total	400

#### EDUCATIONAL RESOURCES

Oparandu, C. (2016). Mobile Phones and Tablets repairs. Charleston SC, USA. CreateSpace.

http://passwordtech.edu20.org

## **NOTES**

**Reasonable Accommodation:** Any student who requires reasonable accommodation must request them at the beginning of the course or as soon acquire the required knowledge that through the Professor in charge and be notifying the Academic Director.

**Honesty, fraud, plagiarism:** Dishonesty, fraud, plagiarism and any other inappropriate behavior about the student's academic performance, constitute violations of the catalog of the institution, its Rules of Conduct and Duties of Student. Major infractions, as provided in the catalog may result in the suspension of the institution for a defined time or permanent expulsion as stipulated in the Rules of Conduct and Duties of Student.