Hugh Baldwin

# **Ethical Hacking**

M30239 TB2

University of Portsmouth
BSc Computer Science
2nd Year

## **Contents**

1 Lecture - Introduction to Penetration Testing

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## **Lecture - Introduction to Penetration Testing**

09:00 22/01/24 Tobi Fajana

### **Weekly Teaching Materials**

- 1 hour lecture
- · 2 hour practical
- Instructional video (Guide for Labs)
- · Compulsory Moodle quiz

#### **Assessments**

- Practical Exam, 2 hours (50%, 20/03/2024)
  - 2 Devices to exploit
  - 5 Vulnerabilities expected, give the name, software, risk rating, a brief description, and corrective actions for each exploit
- Muliple Choice Exam, 1 hour (50%, May/June)

#### CIA

- The three main properties which are protected by cyber security
- Confidentiality Protecting information from being disclosed to unintended parties
- · Integrity Protecting information from being modified, intentionally or otherwise
- Availability Ensuring the information is available to access when it is needed

### **Penetration Testing**

- · Black Box No information about the target
- Grey Box Some information about the target, but not all
- White Box All information given, including source code, etc
- Timeframe There is usually a fixed timeframe for the test
- Penetration Testing is similar to vulnerability assessment, but actual exploits the vulnerabilities

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### **Port Scanning**

- Scan every port on a server to check which ports are open
- Attempt to ping the server on each port
- If a response is given from a port, it must be open