

## GRC Practical Lab Series: Introduction & Overview

**To:** All GRC Students

**From:** Instructor

**Subject:** Integration of Hands-On GRC Lab Series with Curriculum

### 1. Welcome Message

Welcome to the Hands-On GRC Lab Series! This practical component is designed to complement and enhance the theoretical knowledge you have gained in **GRC101**, **GRC102**, and **GRC103**. Over the next 10 labs, you will bridge the gap between governance, risk, and compliance frameworks and their real-world implementation. These labs will empower you to apply your learning in a controlled environment, ensuring you are prepared to address modern cybersecurity challenges with confidence.

### 2. Lab Series Overview

The labs are structured to align with the concepts covered in your coursework. Below is a table summarizing the labs and their alignment with the curriculum:

| Lab # | Lab Title                                | Primary Focus Area     | Alignment with Curriculum  |
|-------|--|------------------------|--|
| 1     | Vulnerability Assessment                 | Technical Fundamentals | GRC101 (Weeks 2-5): Risk Management Fundamentals<br>GRC103 (Week 11): Risk Identification Techniques               |
| 2     | OWASP Top 10 Web App Testing             | Application Security   | GRC102 (Week 6): Principles of Information Security Governance<br>GRC103 (Week 12): Risk Analysis and Evaluation   |
| 3     | Social Engineering & Phishing Simulation | Human Risk             | GRC101 (Week 4): Risk Management Fundamentals<br>GRC102 (Week 7): Developing Security Policies and Procedures      |
| 4     | Digital Forensics & Incident Response    | Reactive Security      | GRC102 (Week 9): Monitoring and Auditing Security Controls<br>GRC103 (Week 14): Risk Monitoring and Reporting      |
| 5     | Security Control Auditing                | Proactive Assurance    | GRC101 (Week 5): Compliance Management and Reporting<br>GRC102 (Week 9): Monitoring and Auditing Security Controls |
| 6     | Cloud & IaC Security Auditing            | Modern Infrastructure  | GRC102 (Week 6): Principles of Information Security Governance<br>GRC103 (Week 13): Risk Treatment Strategies      |

|    |  |                     |   |
|----|--|---------------------|---|
| 7  | Security Monitoring & SIEM             | Detective Controls  | GRC102 (Week 9): Monitoring and Auditing Security Controls<br>GRC103 (Week 14): Risk Monitoring and Reporting             |
| 8  | Data Protection & Privacy              | Privacy Compliance  | GRC101 (Week 3): GRC Regulatory Environment and Standards<br>GRC102 (Week 7): Developing Security Policies and Procedures |
| 9  | Third-Party Risk Management            | Extended Enterprise | GRC101 (Week 4): Risk Management Fundamentals<br>GRC103 (Week 12): Risk Analysis and Evaluation                           |
| 10 | <b>Capstone:</b> GRC Program Synthesis | Strategic GRC       | GRC101 (Week 5): Compliance Management and Reporting<br>GRC103 (Week 15): Practical Risk Assessment Workshop              |

### 3. Overarching Learning Outcomes

By the end of this lab series, you will be able to:

- **Apply** GRC frameworks (e.g., NIST, CIS, ISO27001) to real-world scenarios.
- **Conduct** technical assessments to identify and evaluate risks.
- **Develop** policies and procedures based on regulatory requirements.
- **Create** comprehensive reports for technical and executive audiences.
- **Design** risk treatment and mitigation strategies aligned with business objectives.

### 4. Lab Environment & Prerequisites

#### A. Required Software (Pre-Installed)

- **Virtualization Software:** VMware Workstation Player or VirtualBox.
- **PDF Reader:** For reviewing lab guides and drafting reports.

#### B. Virtual Machines (Download and Import Before Lab Sessions)

1. **Kali Linux (Attacker Machine):**

➤ **Download:** [Kali Linux Official Site](#)

➤ **Credentials:** kali:kali

## 2. Metasploitable 2 (Victim Machine for Labs 1, 4, 5, 7, 8):

➤ **Download:** [Metasploitable 2 on SourceForge](#)

➤ **Credentials:** msfadmin:msfadmin

## 3. OWASP Broken Web Applications (BWA) (Victim Machine for Lab 2):

➤ **Download:** [OWASP BWA on SourceForge](#)

## 5. Lab Schedule and Integration with Curriculum

The labs are scheduled to align with your coursework as follows:

| Lab # | Lab Title                                | Scheduled Week | Aligned Course Week(s) | Curriculum Topics Covered                 |
|-------|--|----------------|------------------------|---|
| 1     | Vulnerability Assessment                 | Week 11        | GRC103 (Week 11)       | Risk Identification Techniques            |
| 2     | OWASP Top 10 Web App Testing             | Week 11        | GRC103 (Week 12)       | Risk Analysis and Evaluation              |
| 3     | Social Engineering & Phishing Simulation | Week 12        | GRC103 (Week 13)       | Risk Treatment Strategies                 |
| 4     | Digital Forensics & Incident Response    | Week 12        | GRC103 (Week 14)       | Risk Monitoring and Reporting             |
| 5     | Security Control Auditing                | Week 13        | GRC103 (Week 15)       | Practical Risk Assessment Workshop        |
| 6     | Cloud & IaC Security Auditing            | Week 13        | GRC102 (Week 9)        | Monitoring and Auditing Security Controls |
| 7     | Security Monitoring & SIEM               | Week 14        | GRC102 (Week 9)        | Monitoring and Auditing Security Controls |
| 8     | Data Protection & Privacy                | Week 14        | GRC101 (Week 3)        | GRC Regulatory Environment and Standards  |
| 9     | Third-Party Risk Management              | Week 15        | GRC101 (Week 4)        | Risk Management Fundamentals              |
| 10    | Capstone: GRC Program Synthesis          | Week 15        | GRC101 (Week 5)        | Compliance Management and Reporting       |

## **6. Conduct & Best Practices**

- **Ethics:** These labs are for educational purposes only. Use the tools and techniques only in the isolated lab environment.
- **Documentation:** Maintain detailed notes and evidence for each lab. This mimics real-world GRC documentation requirements.
- **Collaboration:** Discuss findings with peers, but submit individual reports.
- **Ask Questions:** Engage with instructors to clarify concepts and techniques.

## **7. What to Bring to Each Lab**

- **Notebook and Pen:** For note-taking and drafting reports.
- **USB Drive/Cloud Storage:** To save lab reports and evidence.
- **Lab Guide:** Provided at the start of each session.
- **Virtual Machines:** Pre-loaded and ready to use.

## **8. Conclusion**

This lab series is designed to transform theoretical knowledge into practical expertise. By aligning with your coursework, these labs will help you build a holistic understanding of GRC in action. Let's embark on this journey to become proficient GRC professionals!

**See you in the lab!**