

Penetration Test and Ethical Hacking Master of Science in Cybersecurity

Dr. Nermin Hamza Ewais

Orientation show

عرض توجيہي





Who Am I?

➤ **Dr. Nermin Hamza Ewais**

❖ Assistant Professor in computer science

- Ph.D from Cairo University 2010
- PHD Thesis: “A novel security system for computer networks”
- M.Sc from Cairo University, 2005
- B.Sc from Cairo University , 2000

Dr. Nermin Hamza Ewais **Assistant Professor**



Assistance Professor at computer science department
Faculty of graduate studies for statistical research
Cairo University. Egypt



جامعة الجوامع الذكية
UNIVERSITY OF SMART SYSTEMS



Who Am I?

- ❖ Work.
Cairo University – King Abdulaziz University
- ❖ Training.
CEH – CHFI- Academic Courses
- ❖ Office hours
 - Discussion Time (Wednesday at 9:00 PM) every day
- ❖ How to reach me
 - By email at hamza@midocean.ae
(please include “Penetration Test and Ethical Hacking” in subject line)





The course that will be taught

Penetration Test and Ethical Hacking



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Penetration Test and Ethical Hacking

- *The Penetration testing and Ethical Hacking course provide the skills required for a student to learn how to test the system.*
- A penetration test or pen-test is a test evaluating the strengths of all security controls on the computer system. Penetration tests evaluate procedural and operational controls as well as technological controls.





Primary Goal of This Course

➤ **Learning Outcomes:**

- Demonstrate knowledge of various vulnerabilities in network applications.
- Practice awareness of various malicious content and guiding ways for protection against the same.
- Demonstrate knowledge of various forms of attacks.
- Recall judicious and ethical use of various tools.
- Expertise in the techniques of system hacking and hacking over a wireless network.





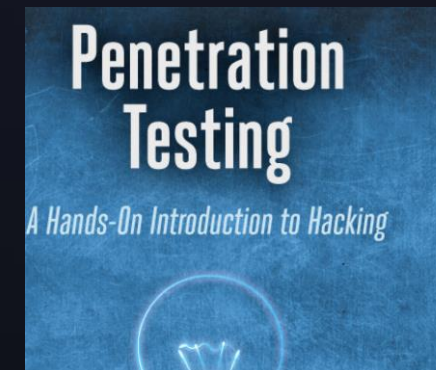
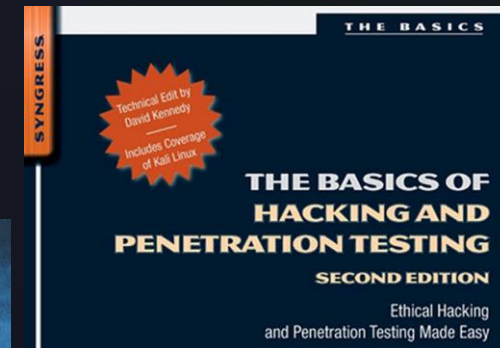
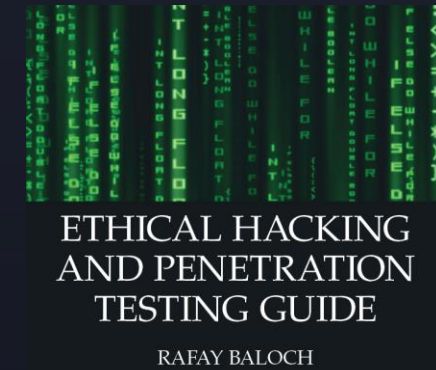
Learning Resources:

➤ **Credit Hours:**

3 credit hours.

➤ **Required Textbook:**

1. ETHICAL HACKING AND PENETRATION TESTING GUIDE, RAFAY BALOCH, 2015 by Taylor & Francis Group, LLC
2. The Basics of Hacking and Penetration Testing, Ethical Hacking and Penetration Testing Made Easy, Second Edition, Dr. Patrick Engebretson, David Kenned Technical Editor, 2013 Elsevier Inc. All rights reserved
3. Penetration testing A Hands-On Introduction to Hacking, Georgia Weidman, 2014 by Georgia Weidman.



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UNIVERSITY OF AL-QADISIYAH





Units of Course Contents

➤ Lecture Structure:

Module	Course Unit	No.of. Weeks	Contact Hours
1	Lecture1 Introduction to Penetration test	1 st	3
2	Lecture2 Information Gathering	2 nd	3
3	Lecture3 Target Enumeration and Port Scanning Techniques	3	3
4	Lecture4 Vulnerability Assessment	4	3
5	Lecture5 Network Sniffing	5	3
6	Lecture6 Web-Based Exploitation	6	3
7	Lecture7 Social Engineering	7	3
8	Lecture8 Post-exploitation	8	3
9	Lecture9 web hacking	9	3
10	Lecture10 attacks and wireless hacking	10	3





Course Information

➤ Assessment Method:

▶ Short Exam

- ▶ 80% marks
 - ▶ Count of short Exam 10 (Weekly)
 - ▶ 8 Marks for each of short Exam.

▶ 20% Final Examination

exam





Academic Calendar

مخطط الأسابيع الدراسية للفصل الدراسي الثالث 2023

الأسبوع	الموضوع	التاريخ
الأسبوع 1	محاضرة توجيهية	30/9/2023
الأسبوع 2	محاضرة - حلقة نقاش - اختبار قصير	7/10/2023
الأسبوع 3	محاضرة - حلقة نقاش - اختبار قصير	14/10/2023
الأسبوع 4	محاضرة - حلقة نقاش - اختبار قصير	21/10/2023
الأسبوع 5	محاضرة - حلقة نقاش - اختبار قصير آخر موعد للاعتذار عن الفصل أو عن مقرر	28/10/2023
الأسبوع 6	محاضرة - حلقة نقاش - اختبار قصير	4/11/2023
الأسبوع 7	محاضرة - حلقة نقاش - اختبار قصير	11/11/2023
الأسبوع 8	محاضرة - حلقة نقاش - اختبار قصير	18/11/2023
الأسبوع 9	محاضرة - حلقة نقاش - اختبار قصير	25/11/2023
الأسبوع 10	محاضرة - حلقة نقاش - اختبار قصير	2/12/2023
الأسبوع 11	محاضرة - حلقة نقاش - اختبار قصير	9/12/2023
الأسبوع 12	حلقة نقاش	16/12/2023
الأسبوع 13	بداية الاختبارات النهائية	23/12/2023
نهاية الدراسة	نهاية الاختبارات النهائية	30/12/2023

-- اللغة الأساسية في
المحاضرات هي:
اللغة الإنجليزية
-- الاختبارات باللغة الإنجليزية
مع وجود
ترجمة للسؤال.



