

CSEC 202 Reverse Engineering Fundamentals Fall 2023 (2231)

Section 01 Lecture/Lab Tue, Thu 8:00 am - 9:15 am GOL 2750

Professor Jonathan S. Weissman

Contact info can be found on the last page.
Weissman Links: linktr.ee/CSCPROF

Any of the following information is subject to modification during the semester.

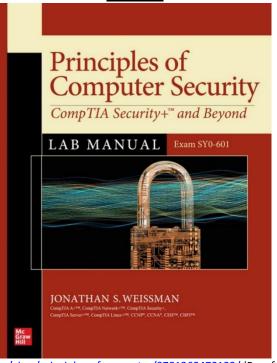


Zoom

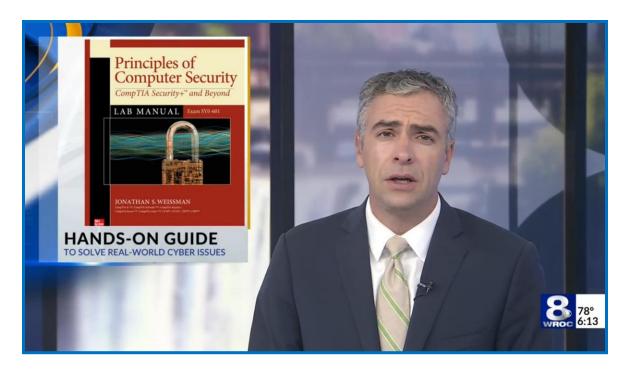
This is a face-to-face course, and you are expected to attend all classes in person. For flexibility (and review), I will have a Zoom meeting, which will be recorded, for each class. Links to meetings and recordings can be found in the Zoom tab in myCourses.



Text #1

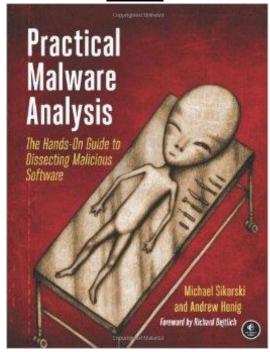


<u>oreilly.com/library/view/principles-of-computer/9781260470123/</u> (Free for RIT students) <u>amazon.com/author/jonathansweissman</u> (My Amazon Author Page)



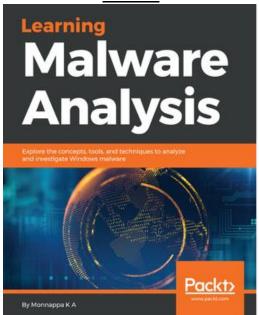


Text #2



learning.oreilly.com/library/view/practical-malware-analysis/9781593272906/ (Free for RIT students)

Text #3



<u>learning.oreilly.com/library/view/learning-malware-analysis/9781788392501/</u> (Free for RIT students)



Course Description

This course will teach students the core concepts needed to analyze unknown source code. Students will study a variety of low-level programming languages and how high-level programming language structures relate to low-level programming languages. Students will learn study tools and techniques used for both static and dynamic analysis of unknown binaries, providing the foundation for further study in malware analysis.

Prerequisite

CSEC 201 or equivalent course

myCourses

<u>mycourses.rit.edu</u> will contain resources, files, tools, announcements, exams, grades, a class log, class recordings, and more.

Late Work

Late work is not accepted and will not be graded unless special permission is granted before the due date.

Grading

Labs	Project 15%		
85%			

Α	A-	B+	В	B-	C+	С	C-	D	F
93-	90-	87-	83-	80-	77-	73-	70-	60-	~60
93- 100	92	89	86	82	79	76	72	69	\00

Academic Integrity

<u>ANY</u> form of an academic integrity violation will result in an automatic, non-negotiable grade of F. <u>rit.edu/academicaffairs/policiesmanual/d080</u>



Schedule

Week	Topics			
1				
2	Basic Static Analysis, Basic Dynamic Analysis			
3				
4				
5	x86 Architecture, Assembly Language			
6				
7				
8	Advanced Dynamic Analysis			
9				
10				
11	Advanced Static Analysis			
12				
13	v64 Architecture & Powercing			
14	x64 Architecture & Reversing			





Academic Calendar

FALL SEMESTER 2023 (Term ID: 2231)				
August 28, 2023 (Monday)	Day, evening, and online classes begin			
	First day of Add/Drop period †			
September 2	Saturday classes begin			
September 4 (Monday)	Labor Day - No Classes			
September 5 (Tuesday)	Last day of Add/Drop period †			
September 6 (Wednesday)	First day to drop from classes with a grade of "W"			
October 9-10	Fall Break - No Classes			
November 10 (Friday)	Last day to drop from classes with a grade of "W"			
November 22	No classes - University closes at 2 p.m.			
November 23-24	Thanksgiving Holiday - University closed			
December 11 (Monday)	Last day, evening, and online classes			
December 12 (Tuesday)	Reading Day			
Dec. 13,14,15,18,19,20	Final exams			
December 22 (Friday)	Final grades due			
Dec. 23 - Jan. 15	Break between Fall Semester and Spring Semester			

[†] The Add/Drop period is the first seven class days of the Fall, Spring, and full Summer terms, excluding Sundays and holidays.

Revised 5/08/2023

rit.edu/calendar













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Golisano College of Computing and Information Sciences



Department of Cybersecurity

Fall 2023 8/28/23 - 12/11/23



Professor Jonathan S. Weissman Principal Lecturer

Department of Cybersecurity
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RIT Distinguished Teacher Recognition Program Honors Recipient 2019 RIT GCCIS Outstanding Educator Award Recipient 2017-2018 RIT Outstanding Teaching Award Recipient 2013-2014

			RTI Outstanding Teaching Award Recipient 2013-2014			
Start/Stop	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00 am						
8:50 am		CSEC 202-01		CSEC 202-01		
9:00 am		GOL 2750	Office Hours In person or Zoom	GOL 2750		
9:15 am	Office Hours				CSEC 600-01 GOL 2780	
9:20 am	In person or Zoom	Office Hours In person or Zoom		Office Hours In person or Zoom		
9:50 am						
10:00 am			NSSA 221-03 GOL 1445		NSSA 221-03	
10:50 am	NSSA 221-03L1				GOL 1445	
11:00 am	GOL 2320	CSEC 140-03 GOL 2730			0611	
11:50 am				CSEC 140-03 GOL 2730	Office Hours In person or Zoom	
12:15 pm						OI ZOOIII

CSEC 140 Introduction to Cybersecurity ~ CSEC 202 Reverse Engineering Fundamentals
Graduate: CSEC 600 Introduction to Computing Security (Hybrid)
School of Information: NSSA 221 Systems Administration I