# REVERSE ENGINEERING

### Fall 2018

Instructor:	G Leaden	Time:	W 8:00 – 9:45 F 11:00 – 12:15
Email:	g.leaden 1@marist.edu	Place:	Hancock 2023

Course Page: http://goleaden.com/RE4Marist

Office Hours: By appointment only. Let's grab  $\stackrel{\text{\tiny th}}{\simeq}$ .

**Required Text:** This book was selected both for its low low cost of \*free\* and its thoroughness. The PDF is still being updated to this day by the author, as this is an ever evolving landscape.

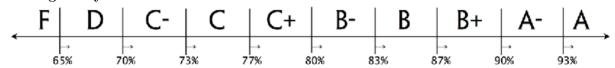
- Reverse Engineering for Beginners by Dennis Yurichev.
- Other resources (Books, Articles, Websites, Challenges, and more) are available on the course page.

**Objectives:** This course aims to build upon skills learned in the prerequisites courses and apply them with the specific purpose of understanding compiled programs through assembly language. Topics covered include: basic assembly operations, disassemblers, and binary analysis. Students will review case studies, smash stacks, and gain a unique perspective into how their software looks at the lowest level.

## Prerequisites:

- CMPT 422
- This course also assumes a basic understanding of:
  - Binary
  - Assembly
  - CPU Architecture

## **Grading Policy:**



Homework and quizzes	$\dots 40\%$
Midterm	$\dots 25\%$
Final Project	$\dots 25\%$
Discussion and Participation	
Preparedness	$\dots 5\%$

## Course Policy:

• Please see the Department of Computing Technology Goals listed on the Marist website.

### Class Policy:

This course requires a desire to learn and apply oneself outside of the classroom. There are many resources outside of this course and its official grades that will enhance your understanding of the material. I suggest you review the resources posted on the course website, and feel free to contact me at any time during the course if you would like to learn more, or just discuss the subject in an informal setting. I am never opposed to grabbing coffee  $\stackrel{\text{th}}{\hookrightarrow}$ .

Reverse Engineering November 1, 2018

# Reading Schedule:

Wednesday	FRIDAY	
Aug 29th Introduction, Overview, Syllabus. No reading.	31st <b>2</b> 1.3, 1.4 Review	
Sep 5th 3 2.1, 2.2 Linear Equations	7th 4	
12th	14th <b>6</b>	
19th 7	21st <b>8</b>	
26th 9	28th <b>10</b>	
Oct 3rd 11	5th <b>12</b>	
10th 13	12th 14	
17th 15	19th <b>16</b>	
24th 17	26th 18	
31st 19	Nov 2nd 20	
7th 21	9th <b>22</b>	
14th 23	16th <b>24</b>	
21st 25	23rd <b>26</b>	
28th 27	30th <b>28</b>	
Dec 5th	7th <b>29</b>	