



# Cyber Competitions

Irvin Lemus, CISSP

Western Academy Support and Training Center  
Faculty Development Week

*Location of slides: <https://github.com/infosecirvin/wastc>*

# Week Agenda

- Day 1: Batman Beyond
- Day 2: Foot of Dig and Net of Lin, with a - of Snake
- Day 3: Sherlock Holmes called; he said “fgbc fdyv'vat zr!”
- Day 4: Pokedexing through the Kanto region
- Day 5: To Battle!

rk rk	5 9:00am Start work 6:00pm Finish work	6 9:00am S 6:00pm F



Batman Beyond

# Overview

- Cyber Competitions are fun and very rewarding
  - *At the very least, make students safer; at best, start students on their career*
  - The physical world and the digital world are one
- Batman Beyond
  - Running VMs locally is so 2010's.
  - No more IT hassle
    - Better defenses for an outside attack coming in vs from an insider
  - Local air gapped systems are fine, if you do the upkeep



# Materials

- Google Cloud Platform account (free \$300 credit) [cloud.google.com](https://cloud.google.com)
  - You can request class credits here: <https://google.dev/edu>
- Any computer with an up-to-date browser and Internet connection will work
- Getting Started with GCP (3 PDFs) available at GitHub
  - Setup 1 (getting started with GCP), 2 (making a Windows VM), 3 (making a Linux VM)



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School: [Cabrillo College \(Aptos, CA\)](#)  
Course:

Course Start Date: [6/8/2020](#)

Students' email domain(s): [@cabrillo.edu](#)

Students can request coupons from the URL and redeem them until:

[10/8/2020](#)

Coupons Valid Through: [6/8/2021](#)

Number of Coupons:

Face Value of Coupon(s): [USD 50.00](#)

Please share the following information with your students so they can request their coupon code. We've made this easier for you by drafting this so you can just cut and paste and email this out to your students.

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Dear Students,

Here is the URL you will need to access in order to request a Google Cloud Platform coupon. You will be asked to provide your school email address and name. An email will be sent to you to confirm these details before a coupon is sent to you.

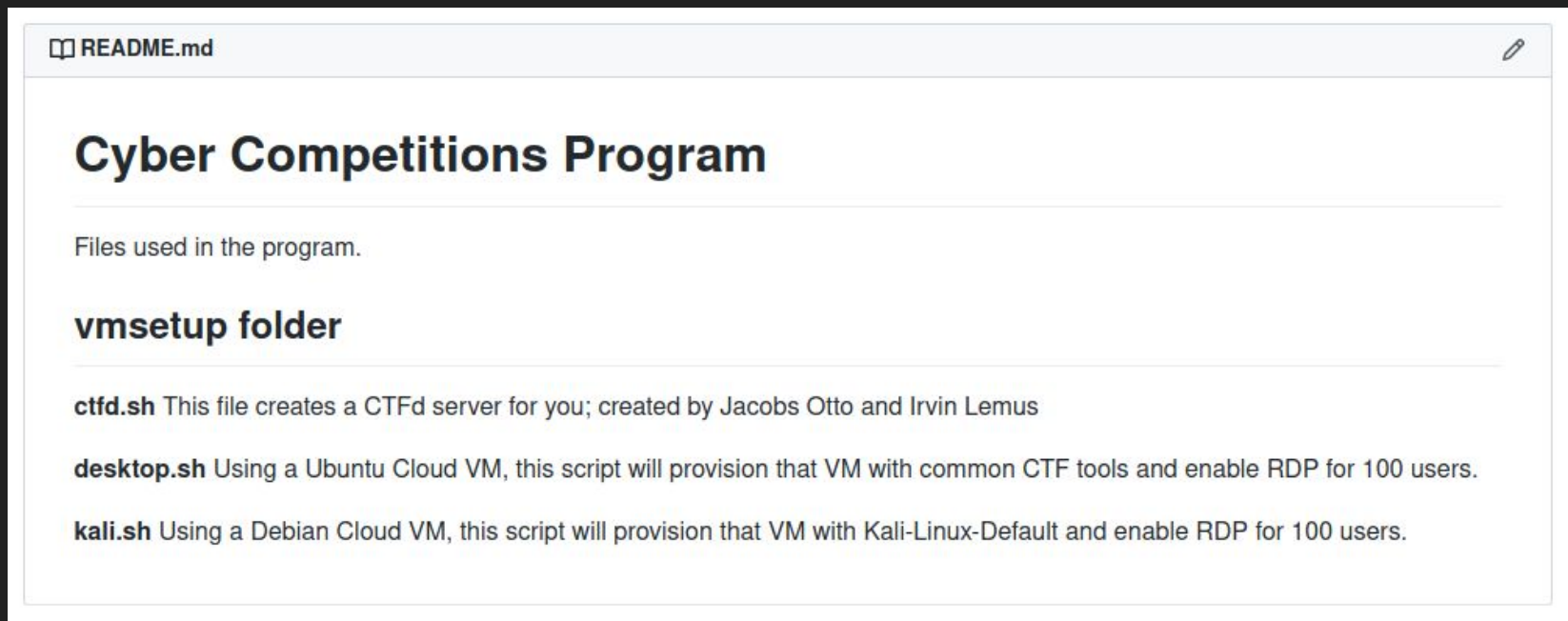
[Student Coupon Retrieval Link](#)

- You will be asked for a name and email address, which needs to match the domain. A confirmation email will be sent to you with a coupon code.
- You can request a coupon from the URL and redeem it until: [10/8/2020](#)
- Coupon valid through: [6/8/2021](#)
- You can only request ONE code per unique email address.

Please contact me if you have any questions or issues.

# Building the Infrastructure

- <https://github.com/infosecirvin/cybercompetitions>



# What do Competitors need to know?

- Ideally, nothing!
- *Can* have prior knowledge in
  - IT Essentials
  - CCNA 1
  - Linux Unhatched
  - Programming (Python, JavaScript)





# What do Competition Makers need to know?

## Minimum:

- IT Essentials
- Networking (CCNA 2+)
- Linux & Bash scripting
- *Security+*

## Recommended/Learning:

- DFIR
- Penetration Testing
- Web App Exploitation
- Programming (Python)
- Databases

## On the Job Skills:

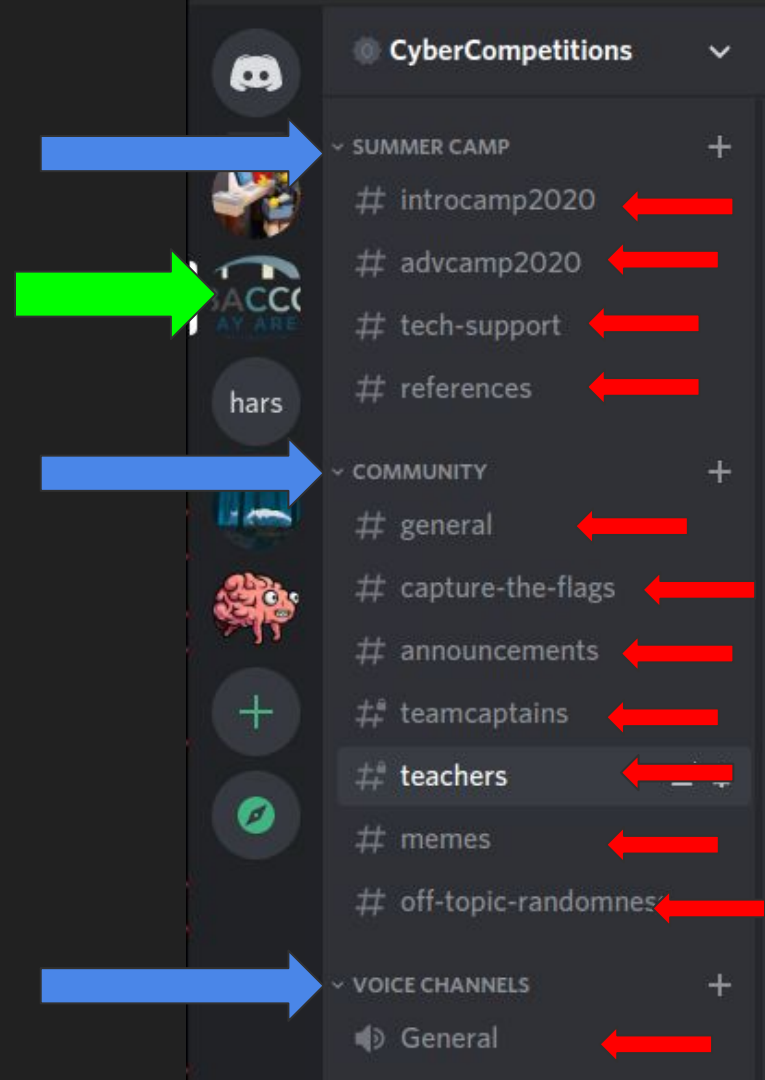
- Github
- Docker
- LAMP
- Kubernetes
- CTF experience
- Time Management
- Documentation & Reporting
- Soft Skills
- And more depending on the projects



# Discord

Discord is a free voice, video and text chat app for teens and adults ages 13 and up

- **Server:** community
- **Category:** Group of channels
- **Channels:** Text/Voice Specific subjects
  - #: Text Channel
  - # with lock: certain users can access
  - Speaker: Voice channel





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