ECE 447 Fall 2025
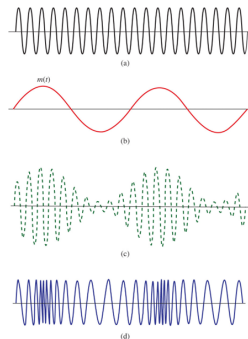
Lesson 02
Communication
Systems Overview

UNITED STATES
AIR FORCE
ACADEMY

SCHEDULE AND ADMIN

- Schedule
- Admin
  - Skills review due to Gradescope by 1159 of M3
  - Lab 1 next time! Read through ahead of time. Download, **but do *NOT* run**, zadig.exe from Teams

MODULATION

- What is modulation?
  - Using a *baseband* message signal to change some parameter (amplitude, frequency, phase) of a carrier signal
  - Carrier is a high frequency sinusoid
  - **Modulating** signal = *baseband* message signal
  - **Modulated** signal = modified carrier signal; *bandpass* signal; aka *frequency translated* signal
- Why use modulation?

WHAT ABOUT THE OTHER PARTS OF A COMM SYS?