Part 107 Test Preparation (12 hrs)

1. Regulations
    a. Numbers, Letters, and Laws
    b. Team
    c. Accident reporting
    d. Registration
    e. Risk and risk assessment
2. National Airspace System
    a. NOTAM
    b. Airspace
    c. Special Use Airspaces
    d. Sectional Charts
    e. Airspace
    f. Topography
    g. Runways
    h. Runway Markings
3. Weather
    a. Fronts
    b. Visibility and Clouds
    c. Thunderstorms
    d. METAR
    e. TAF
    f. Weather Briefing
4. Load and Performance
    a. Center of Gravity
    b. Load Factor
    c. Stalls
    d. User Manual
5. Operations
    a. Maintenance
    b. Logbook
    c. Radio
    d. Pilot's Alphabet
    e. Chart Supplement
    f. Hazardous Attitudes
    g. Physiology Risks
    h. Density Altitude

Modules

1. Business (2 hrs)
    a. Problem or challenge addressed
    b. Purpose
    c. Value Proposition
    d. Target Customers
    e. Differentiation from competitors
    f. Organizational Structure

g. Business model
h. Budget
2. Cyber Security (2 hrs)
    a. Definitions of cyber security
    b. Cyber security policies
    c. Use of drones and cyber security
    d. Drones that prevent attacks
    e. Drones that can be subject to attack
    f. Protection against attacks
3. Critical Thinking (2 hrs)
    a. Logic puzzles
    b. Moral dilemmas
    c. Solving problems with policies
    d. Maintaining discussions
4. Simulation (2 hrs)
    a. Controller behaviors
    b. Basic maneuvers
    c. Intermediate shapes
    d. Basic missions
    e. Flight views in standing, chase, and FPV modes
    f. Free flight
5. Flight school (2 hrs)
    a. Controller behaviors
    b. Equipment understanding
    c. Basic maneuvers
    d. Basic missions through obstacle course
6. Maintenance (2 hr)
    a. Battery care
    b. Propeller inspection and replacement
    c. Storage and care
    d. Troubleshooting

Advanced Flight Course Outline

1. Equipment
   a. Recognize parts
   b. Maintenance
   c. Read manuals/master repair skills
2. Basic Maneuvers
   a. Examine equipment capabilities
   b. Identify physics of UAV
   c. Complete controlled flight through obstacles
   d. Mastery: muscle memory for menuevers
3. Crew Roles
   a. Demonstrate crew roles during obstacle course flight
   b. Practice roles
   c. Build team rapport/communications
4. Crew Communication
   a. Recall flight command terminology
   b. Discuss crew responsibilities
   c. Utilize communication technologies among crew
5. Missions
   a. Recognize crew roles during mission
   b. Distinguish crew roles during mission
   c. Examine equipment before and after flight
   d. Plan mission to completion
   e. Discuss center of gravity with payload
   f. Demonstration accurate flying with off-center payload
   g. Problem solving
   h. Project completion/success
6. First Person View
   a. Compare equipment limitation during First Person View (FPV)
   b. Practice communication skills in FPV with available technologies
   c. Complete rescue mission in FPV