Advanced Open-Source Intelligence (OSINT) Course Syllabus

About Echo Analytics Group

Echo Academy (EA) is the training division of Echo Analytics Group (EAG), an open-source intelligence (OSINT) research and analysis company founded in 2015. Its founder, Harry "Buddy" Jericho, discovered early in his service with the Department of Defense throughout 2007 the significant impact social media had across the world. However, the massive amount of information uploaded to the internet daily was helpful but not always reliable. This availability of information led to the development of research methods and technologies to find and analyze reliable information quickly. The result was the creation of an in-house methodology and an analytic tool resources platform; Discover, Develop, Monitor (D2M™) and the Cyber Intelligence Dashboard (CID).

EA now provides perspectives-based digital media analytics training to public and private sector businesses and government entities, aligning it with the EAG company mission; to be the most trusted name in OSINT education, technology, and services.

EA has trained over 4,000 professionals across the globe on basic and advanced digital media analysis. The instructional staff continually performs quality control of its training by applying information gathered through course surveys to improve and evolve the curriculum. Because of these ongoing quality control efforts, instructors can modify and customize each course to the unique requirements of its attendees as a matter of corporate policy. Further, practical and capstone exercises are client-determined.

About Our Courses

Designed by government professionals for government professionals, our courses focus on the evolution of digital media and the critical thinking skills required to apply unbiased analytic thought to navigate the massive amounts of data that is now at everyone's fingertips. Students learn how to apply critical thinking techniques while navigating the D2M methodology framework. Students are also introduced to digital media analytic tools, using CID, enabling each student to build customized tool workflows that work best in their field to ensure consistent performance and the ability to adapt to an ever-changing landscape of data. Each student is then put to the test by participating in a capstone exercise that will challenge their ability to locate information and develop an intelligence product to present to the class for peer review assessment.

Syllabus

Course Title: Advanced Open-Source Intelligence Course

Language: English

Skill Level: Intermediate-Advanced

Program Duration: 40 Hours

How to Successfully Complete the Course

To complete this course, you will need to:

- Complete all five days of training

- Pass all quizzes and final assessment with a score of 80% or higher.

- Submit an end of course product or conduct a Capture the Flag (CTF) exercise

This Course Includes:

- Access to Cyber Intelligence Dashboard

- Access to reference and learning materials

- Certificate of Completion

Who should attend this course:

- OSINT Collectors

- Data Collectors

- Open-Source Collectors

- OSINT Analysts

- Social Media Analysts

- Intelligence Professionals

- Law Enforcement Professionals

- Journalists

- Research Professionals

Course Scope

This is a hands-on course during which students will engage in multiple exercises to test their ability to navigate the publicly available information landscape using workflow processes and tools. For the class, students will be provided access to a Microsoft OneNote on their first day. This OneNote is designed around the entire course and aligned with each learning module, enabling students to take notes throughout the course, to include cross-view notes taken by other students to facilitate collaboration. Students will also have access to the Cyber Intelligence Dashboard (CID) that enables students to build custom OSINT workflows to support their classroom training and apply it to real-world operations.

Course Description

This course focuses on our unique Discover, Develop, Monitor (D2M™) methodology to distinguish the OSINT Tradecraft. It will arm students with the ability to assess the online Information Environment (IE) accurately, rapidly, and with effectiveness in a competitive training environment, using perspectives based Publicly Available Information (PAI) research methods, reinforced through hands-on practical exercises and a final culminating exercise tailored to fit the

student's current operational environment. The comprehensive course will consist of classroom discussions, practical exercises, case study scenarios, quizzes, and a final team exercise.

Course Pre-requisites

Completion of one of the following:

- OS116/OE116 Fundamentals of Open-Source Research and Analysis
- OS100-DL Open-Source Information Analyst (OSIA) on-demand/online
- Department of Defense Open-Source Analysis course or its equivalent
- Consent of Instructor of Record

Assessments

The Advanced Tradecraft course has several assessments in the form of Capture the Flag (CTF) practical exercise and quizzes. Each CTF is created to reinforce the application of new tools, concepts, or workflows. The final exercise will include either a capstone or comprehensive CTF. Students will have a choice to study a topic of interest for their final project or have the instructors create a CTF for them. If students choose CTF, they will be given several questions (which the instructors will have detailed answers to) to answer and show how they arrived at their conclusions. All assessments whether they be quizzes, indirect assessments, or surveys are mandatory and we ask that you provide honest feedback about your experience.

Course Learning Outcomes

Upon completion of this course, learners will be able to:

1. Explain intelligence cycle, requirements, and disciplines.
2. Identify the various technical components associated with the internet and web.
3. Demonstrate and execute positive digital footprint and properly manage attributions.
4. Identify the proper methods to collect, harvest, and scrape open-source information.
5. Demonstrate critical thinking and have a defined strategy for collecting data and maintaining operational security through the research, collection, and CONOP plan.
6. Apply the Discover, Develop, and Monitor methodology throughout the collection process.

Subjects by Day

- **Day 1**- Critical thinking and D2M
  - Course Admin and Introduction
  - Capstone Exercise Overview
  - CTF Exercise
  - Media Bias and Propaganda
  - Discover, Develop, and Monitor Methodology
  - Self-Deception
  - Outward Mindset

- o Critical Thinking
- o Fallible Human Tendencies
- o CTF exercise
- **Day 2**- OSINT Tools and Personas
  - o Cyber Intelligence Dashboard overview
  - o Tool Demonstrations
  - o Online Persona
  - o Persona Development Lab
  - o Adversaries Use of the Internet
  - o CTF Exercise
- **Day 3**- Geo referencing, Social Network, Sentiment, and Imagery Analysis
  - o Mapping tool demonstration
  - o Georeferencing CTF Exercise
  - o Social Network Analysis (SNA)
  - o Sentiment Analysis
  - o Deepfake Photos and Videos
  - o Capture the Flag CTF Exercise
- **Day 4**- Issue Capstone topics
  - o Students will conduct in depth analysis of the research topic of interest
  - o Individual instruction as needed
- **Day 5**- Presentation of Findings
  - o Students will present their findings through oral and visual presentation. No longer than 10 minutes.
  - o Students will be assessed on their collection plan, research plan and log, risk assessment, PAI Tool and Data Risk Assessment, D2M tracker, Persona, SNA, and future monitoring requirements.

Accessibility

Echo Academy is committed to its learners and adheres to equal opportunity standards of conduct. Accessible versions of this syllabus along with other documents are available upon request. Please inform the instructor of any requests.