CAVE SURVEY SYLLABUS

DAY 1: INTRO TO MANUAL SURVEY AND SOFTWARE

UNIT 1: Basic Survey

- Paperwork
- Assemble dive gear
- □ Theory 1: Methods and tools for cave survey
- Land drill: manual survey
- Drive to dive site
- Locate and record zero datum
- Instructor runs line from zero datum to cavern
- Cavern line survey (in)
- Photograph slate and break down gear

UNIT 2: Data Entry and Considerations

- Time comparison for survey vs swim
- □ Familiarization with Ariane Line Software
- □ Theory 2: Survey grades and sources of error

DAY 2: LINE WORK, COMPLEX MANUAL SURVEY

UNIT 3: Safety and linework

- Assemble dive gear, including reel and arrows!
- Theory 3: Planning and safety considerations
- Land drill: laying/manipulating line
- Locate and record zero datum
- $\hfill\square$ Diver runs a survey line and then surveys it
- Must have loop and intersections
- Photograph slate and break down gear

UNIT 4: Plotting complex surveys, Google Earth

- Plot complex survey in Ariane Line
- Data you can access from Ariane Line
- Export options/kml/Google Earth

DAY 3: INTRO TO ELECTRONIC SURVEY

UNIT 5: mNemo use and notes

- Assemble dive gear, including reel and arrows
- Theory 4: Note-taking for complex surveys
- Land drill: using the mNemo
- Locate and record zero datum
- Survey with mNemo and take notes
- Photograph slate and break down gear

UNIT 6: importing electronic survey

- Import mNemo into Ariane Line
- Add notes and details

DAY 4: THINKING IN 3D: LRUDS AND MNEMO

UNIT 6: LRUD estimates

- Assemble dive gear
- □ Land drill: LRUDs/ mention Sonar
- Locate and record zero datum
- Survey with mNemo and take LRUDs
- Photograph slate and break down gear

UNIT 6: importing electronic survey

- Add LRUDs to a survey
- Add notes and details
- Play with 3D in Ariane line