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INSS 5307: OPEN SOURCE INTELLIGENCE ANALYSIS
Fall 2021
Duration: 08/23/2021-12/02/2021
CRN: 18011
LART 403
Monday 6:00-8:50pm

I. TEXTBOOK

Brazzell, M. (2021). *Open source intelligence techniques: Resources for searching and analyzing online information (8th edition)*. ISBN-13: 979-8578577086

https://www.amazon.com/dp/B08RRDTFF9/ref=as_li_ss_tl?crid=LT0P22CLQQTP&dchild=1&keywords=michael+bazzell+open+source+intelligence&qid=1609516030&sprefix=michael+bazzell,aps,195&sr=8-19&linkCode=sll1&tag=inteltechniques-20&linkId=ea6851101089379d964627527f61833c&language=en_US

II. OBJECTIVES

Upon satisfactory completion of this course, the student will be able to:

- A. Understand the tools and methods used to gather open source intelligence.
- B. Apply open source intelligence gathering techniques to extract actionable threat intelligence across a variety of online platforms.
- C. Analyze extracted intelligence to identify active and emerging security threats.
- D. Develop proactive solutions to combat threat actors and improve security posture.

III. CATALOG DESCRIPTION

This graduate course will examine critically the scope of the open source environment including primary, secondary, and technical sources. It will demonstrate the strengths and weaknesses of open sources as a basis for intelligence information and analysis. Students will be exposed to various open source analytic techniques and methodologies. The course will culminate in an analytic, forecasting exercise utilizing various open source techniques including citation analysis and overt human networks. It is recommended that the student complete INSS 5305 prior to this course. Prerequisite: INSS 5302 with a grade of B or higher and department approval.

IV. COMMUNICATION

Email: UTEP e-mail is the best way to contact me. I will make every attempt to respond to your e-mail within 24-48 hours of receipt. When e-mailing me, be sure to email from your UTEP student account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.

Announcements: Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

Office Hours: I am available to meet in person or virtually upon request. Appointments should be scheduled via e-mail.

V. COURSE REQUIREMENTS

Punctuality and Attendance (10%)

Unless absences and/or late arrivals are pre-approved, or due to a reasonable excuse as outlined in the university handbook, **attendance and punctuality are required!** This course is heavily reliant on classroom discussions and lab participation, requiring physical attendance. Moreover, arriving to class late is disruptive and disrespectful. If you know you cannot make it to class on time, let me know in advance!

1st Transgression

- Life happens! I will not deduct points for the first unexcused absence or late arrival. However, without pre-approval or a reasonable excuse you may still lose points on other assignments.

2nd Transgression

- **I will deduct 5 points from your final grade** for the second unexcused absence or late arrival. You may also lose points on other assignments.

3rd Transgression

- **I will deduct 10 points from your final grade** for the third unexcused absence or late arrival. You may also lose points on other assignments.

Final Report (30%)

A satisfactory report will include a:

- summary of the techniques used to gather actionable threat intelligence.
- visual representation of the information extracted during lab hours.
- discussion of the strengths and weaknesses of open sources as a basis for intelligence information and analysis.
- proactive solution to combat active and emerging threat actors and improve security posture.

This report will require students to write thoughtfully using formal academic language, APA style citations, and academic sources beyond class readings.

- Paper must be 10-20 pages in length.
- Have at least 10 academic articles (not news sites, websites, or textbooks). These must be journal articles.
- Paper must use formal, academic, conventional writing style.
- APA in-text citations and references

See the grading rubric in Blackboard for a more detailed discussion of the criteria for this assignment. **This assignment is due on November 22nd!**

Presentation (10%)

The final report will be presented in the form of a PowerPoint presentation on **November 29th**. The presentation should follow the same format as the final report and include a 1.) summary of the techniques used to gather actionable threat intelligence; 2.) visual representation of the information extracted during lab hours; 3.) discussion of the strengths and weaknesses of open sources as a basis for intelligence information and analysis; and 4.) proactive solution to combat active and emerging threat actors and improve security posture.

See the grading rubric in Blackboard for a more detailed discussion of the criteria for this assignment.

Summary of Assigned Readings (15%)

Students must submit a written summary of the assigned readings at the **beginning** of each class! If the student is unable to attend class, the written summary must be submitted prior to the scheduled class time.

See the grading rubric in Blackboard for a more detailed discussion of the criteria for this assignment.

Class Discussion (15%)

In addition to the written summary, students must come to class prepared to discuss the assigned readings. Students should be prepared to present the weekly readings upon request.

I will **NOT** provide a lecture or supplemental slides relating to the assigned readings! Instead, we will spend time engaging in an informed discussion of the readings then apply the newly acquired knowledge through various lab exercises. Thus, the success of the course is contingent on the weekly readings!

Lab Participation (20%)

Students will implement their newly acquired skills during class. Specifically, students will be expected to gather threat intelligence from various online platforms using open source intelligence gathering techniques. Students must be present and actively engaged in all lab activities. Absences should be approved prior to the scheduled class time. Unless absences are pre-approved, or due to a reasonable excuse as outlined in the university handbook, non-attendance will result in a reduction of points.

VI. GRADING SCALE

A = 90 – 100%

B=80–89%

C=70–79%

D=60–69%

F = below 60%

VII. LATE WORK

Please regularly refer to Blackboard for links, documents, announcements, and calendar changes. You are responsible for being up-to-date on all class information that is posted on Blackboard. Although I will try to provide you with reminders for exams, you are ultimately responsible for submitting all assignments and exams on time. Note that, as with any online program, Blackboard may experience unexpected technical difficulties from time to time. For this reason, I strongly suggest that you do not wait until the last minute to submit assignments. Technical difficulties are no excuse for late submissions. **No late work will be accepted without prior approval if the reason is not considered excusable.**

VIII. INCOMPLETE GRADE POLICY

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

IX. TECHNOLOGY REQUIREMENTS

Course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another

browser.

You will need to have access to a computer/laptop. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about [Microsoft Office 365](#) and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP [Help Desk](#) as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

X. NETIQUETTE

As we know, sometimes communication online can be challenging. It's possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep these netiquette (network etiquette) guidelines in mind. Failure to observe them may result in disciplinary action.

- Always consider audience. This is a college-level course; therefore, all communication should reflect polite consideration of other's ideas.
- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment or inappropriate postings will be tolerated.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space.

XI. ACCOMMODATIONS POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).

XII. SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as one's own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office](#)

[of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

XIII. COVID-19 PRECAUTIONS

Please stay home if you (1) have been diagnosed with COVID-19, or (2) are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit [epstrong.org](#)

XIV. COURSE RESOURCES: Where you can go for assistance

UTEP provides a variety of student services and support:

Technology Resources

- [Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources

- [UTEP Library](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- [University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- [Math Tutoring Center \(MaRCS\)](#): Ask a tutor for help and explore other available math resources.
- [History Tutoring Center \(HTC\)](#): Receive assistance with writing history papers, get help from a tutor and explore other history resources.
- [RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

Individual Resources

- [Military Student Success Center](#): Assists personnel in any branch of service to reach their educational goals.
- [Center for Accommodations and Support Services](#): Assists students with ADA-related accommodations for coursework, housing, and internships.
- [Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.

XV. COURSE SCHEDULE

<p>Week 1: 08/23</p> <p>Introduction and Syllabus Review</p>	<p>Week 9: 10/18</p> <p>Chapters 20-22 Discussion: Documents, Images, and Videos</p>
<p>Week 2: 08/30</p> <p>Chapter 9 Discussion: Search Engines</p>	<p>Week 10: 10/25</p> <p>Chapters 23-24 Discussion: Domain Names and IP Addresses</p>
<p>Week 3: 09/06</p> <p>Labor Day-No Class</p>	<p>Week 11: 11/01</p> <p>Chapters 25, 26, and 28 Discussion: Government Records, Virtual Currencies, and Data Breaches</p>
<p>Week 4: 09/13</p> <p>Chapters 10-13 Discussion: Social Networks</p>	<p>Week 12: 11/08</p> <p>Section 3 Discussion: OSINT Methodology (Chapters 29-Conclusion).</p>
<p>Week 5: 09/20</p> <p>Chapter 14 Discussion: Online Communities</p>	<p>Week 13: 11/15</p> <p>Library Research Day-No Class</p>
<p>Week 6: 09/27</p> <p>Chapters 15-16 Discussion: Email Addresses and Usernames</p>	<p>Week 14: 11/22</p> <p>Final Paper Due</p>
<p>Week 7: 10/04</p> <p>Chapters 17-18 Discussion: People and Telephone Numbers</p>	<p>Week 15: 11/29</p> <p>Presentation Day</p>
<p>Week 8: 10/11</p> <p>Chapter 19 Discussion: Online Maps</p>	

*Calendar subject to change