

CRIM 312-001: Intelligence Analysis Techniques
Fall 2019
George Mason University
Monday & Wednesday, 4:30pm – 5:45pm, ENT 276

Professor and Contact:

Professor: Dr. Terry Gudaitis

Contact Info: tgudaiti@gmu.edu

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Office hours: Monday & Wednesday - 2:30pm - 4pm; or by appointment

Email/Blackboard and Communication:

Please check your Mason email. I will communicate regularly with students through Mason email. See <http://masonlive.gmu.edu> for information on how to use your account. In an emergency, if you need to use a different email address please notify me or set up forwarding to that address. I check my email frequently and it's the quickest way to reach me.

Each set of lecture notes/slides, course readings, and data sets will be posted to Blackboard.

Course Description and Objectives:

The objective of this course is to introduce the key analytical techniques used by entry-level analysts in the Intelligence community. Throughout this course students will learn several methods of intelligence analysis including social network analysis, decision trees, assessment of crime data, Venn analysis, Gantt charts, open source intelligence collection/analysis, and predictive analysis. Students will learn how to transform raw information into critical intelligence used to understand problems and issues.

Required Textbook: No book. Readings will be posted to Blackboard each week.

Disclaimer and Alert:

The materials we will be covering may contain information pertaining to terrorism, crime, and/or other potentially disturbing content, which can be disconcerting to some. Please be advised about this material, as it can be difficult/upsetting to analyze. If you feel you need to talk to someone, please contact the George Mason Counseling and Psychological Services at 703-993-2380 or online at caps.gmu.edu.

Course Format:

Class will mainly be presented in lecture format. There will be class participation exercises as well as relevant case studies. Corresponding materials will be posted on Blackboard throughout the course or emailed to the students. The posted materials on Blackboard may not necessarily be identical to those presented in class. Therefore, attending lectures on a regular basis will be beneficial to your grade in this course.

Course Policies:

Audio recording of lectures to augment in-class note taking is only permitted with advanced notice and with instructor's permission. Videotaping in any form is not permitted. Laptops, iPads & Tablets are permitted but must only be used for note taking. Smartphones should not be used for any reason during class. If you have an emergency (e.g., text, email, or other notice from social media), please excuse yourself from class to respond to the critical communication. Please be respectful of your peers and your professor and do not engage in activities that are unrelated to class.

Attendance/Class Participation:

Students are responsible to attend class. Class attendance is mandatory and will impact your grade. An attendance sheet will be passed around or taken during each class. Students are not permitted to sign the attendance sheet for another student. In-class participation is important and adds to the learning environment. Attendance/class participation will impact your final grade.

Honor Code:

George Mason University has an Honor Code, which requires all members of this community to maintain the highest standards of academic honesty and integrity. All students are expected to be familiar with this Honor Code. Cheating, plagiarism, lying, and stealing are prohibited. All papers/reports are run through several plagiarism software programs and databases. All violations of the Honor Code will be reported to the Honor Committee. See honorcode.gmu.edu for more detailed information.

Students with Disabilities:

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703-993-2474. All academic accommodations must be arranged through that office.

Add/Drop Period and Fall 2019 Calendar:

Students are responsible for verifying their enrollment in class. Schedule adjustments should be made by the deadlines published in the Schedule of Classes. Available from the Registrar's Website at registrar.gmu.edu. After the last day to drop a class, withdrawing from the class requires the approval of the dean and is only allowed for nonacademic reasons. Undergraduate students may choose to exercise a selective withdrawal. See the Schedule of Classes for selective withdrawal procedures.

A full Fall 2019 calendar is available at: <https://registrar.gmu.edu/calendars/fall-2019/>

Grading:

Your final grade will be calculated with four components as follows for a total 100 points:

1. Attendance/Participation: Missing more than 5 classes will lower your final grade by ½ grade (e.g., A to A- or B- to C+)
2. Exam #1 - Midterm: 25 points
3. Exam #2 - Final: 30 points
4. 2 Mini-projects/homework: 10 points each = 20 points
5. Intel Analysis Project: 25 points

Grading Scale:

Letter Grade	Total Points
A+	97 – 100
A	93 – 96
A -	90 – 92
B+	86 – 89
B	82 – 85
B-	80 – 81
C+	76 – 79
C	72 – 75
C-	70 – 71
D	65 – 69
F	64 and Below

Exams (Midterm = 25 points; Final = 30 points):

The midterm and final exams will be a combination of a few multiple choice & fill-in-the-blanks. The majority of the exams will be scenarios or data sets in which you will implement various intelligence analysis techniques. Make-up exams will only be given under exceptional, unavoidable circumstances with proper documentation. If you know in advance that you will have to miss an exam, please notify me ASAP. Taking an exam late may result in a penalty.

Mini-Projects (10 points each):

There will be 2 assigned mini-analysis projects. Details and structured data methodologies used in these projects will be covered in class. Mini-Projects will be handed in hard-copy and properly classified (Unclassified – FCUO).

- Mini-Project #1 – Crime Analysis - <http://police.gmu.edu/wp-content/uploads/2019/01/2018-Daily-Crime-and-Fire-Logs.pdf>
- Mini-Project #2 – Geo-spatial Analysis - <https://www.globalexplorer.org/>

Threat Intelligence Analysis Project (25 points):

You will collect relevant intelligence on a “mark” from various open sources and create an intelligence dossier on your mark. The dossier will include: 1) any and all information collected on this individual (including visuals); 2) the analytic method(s) used to assess the data; 3) predictive analysis; and, 4) a developed approach technique. A full criteria will be provided in class.

In order to turn in your analysis project, it will be constructed as a PowerPoint presentation. References used for intelligence collection as well as the analytic methodologies used should be from various sources, including but not limited to textbooks, academic journals, professional journals, and web based materials. All hard copy and online sources need to be properly cited in APA style within the paper and in a reference list. Proper classification (e.g., Unclassified – FCUO) is also required.

The Intel Project is due WEDNESDAY NOVEMBER 20th 2019. **DIGITAL COPIES ONLY in a .PDF'd PowerPoint via GMU email. Late projects will incur a penalty.**

Privacy Policy:

Please respect the privacy of any students (and the instructor) who may disclose personal information in the class. Students may be collecting investigating various open sources including web data, social media, and other online databases. Any information/intelligence collected should be considered sensitive and for in-class use only.

Bad Weather and Other Emergencies:

Check Mason's homepage at www.gmu.edu or call GMU's closing line at 703-993-1000 to see if classes are cancelled for inclement weather or other emergency circumstances. You can also register for Mason's emergency alert system at <https://alert.gmu.edu>. If I have to cancel class due to an emergency, I will attempt to email you ASAP at your GMU email address. I encourage you to check your GMU email the night before class or the morning of to ensure there have been no cancellations.

Course Schedule

This is the intended course schedule. As the semester progresses and evolves, some of these dates and scheduled items may change due to weather closures, emergencies, guest lecturer schedules, or other circumstances. Changes will be provided as necessary and as soon as possible.

In addition to reviewing the chapter information, the classroom sessions will include lectures, case studies, applied intelligence exercises, and scenarios.

MON AUG 26 Introductions and Introduction to the course - Goals, Objectives, and Expectations

WED AUG 28 Reading 1 – Critical Thinking and Reading 2 – Critical Thinking for Intelligence Analysts
Lecture: The Analyst's Job

MONDAY SEPTEMBER 2 – NO CLASSES – LABOR DAY

WED SEPT 4 Reading 3 – Structured Analytic Techniques and Reading 4 – ODNI Analysis
Lecture: Thematic and Content Analysis

MON SEPT 9 Reading 5 – Social Network Analysis and Reading 6 – SNA Handbook & Toolkit
Lecture: Using Social Network Analysis

WED SEPT 11 Homework – Collect Social Network Data
Lecture: In class – social network analysis exercise

MON SEPT 16 Reading 7 – ABC Analysis
Lecture: Chronologies and Applying ABC Analysis

WED SEPT 18 Homework – Review 2017 GMU Police/Crime Data Set
Lecture: Analyzing Crime Data and Review of Mini-Project #1 Criteria

- MON SEPT 23 Reading 8 – Decision Trees
Lecture: The Application of Decision Trees in Intel Analysis
- WED SEPT 25 Homework – Collect Information for Personal Decision Tree
Lecture: In-class decision tree analysis exercise
- MON SEPT 30 Reading 9 – CIA Officer: What I Learned
Lecture: Guest Speaker – Intelligence Analysts
- WED OCT 2 Reading 10 – ODNI Threat Assessment and Reading 11 – Country Study
Lecture: Country Assessments and Understanding Culture

Mini-Project #1 (Crime Data Analysis) Due

- MON OCT 7 Reading 12 – NASA Satellite Imagery
Lecture: Geo-Spatial Analysis and Criteria for Mini-Project #2
- WED OCT 9 Review for Midterm (Readings 1-11 and class notes)

MONDAY OCTOBER 14 – NO CLASSES – COLUMBUS DAY

TUES OCT 15 EXAM #1: MIDTERM – in class – NOTE THIS IS A TUESDAY!!!!

- WED OCT 16 Reading 13 – Intuitive Theories of Behavior and Analysis
Lecture: HUMINT, Marks, and Open Source Intelligence – Criteria for Intel Project
- MON OCT 21 Reading 14 – Reference Guide OSINT Sources
Final Selection of “Mark” for the Intel Project and “Red Teaming”
Lecture: Open Source/Cyber Intelligence – Gathering Information and Data
- WED OCT 23 Reading 15 – Social Media and Physical Security
Lecture: Assessments and Making Recommendations
- MON OCT 28 Reading 16 – Threat Intelligence
Lecture: Evaluating Threats, Risks, and Vulnerabilities
- WED OCT 30 Reading 17 – NSA’s Intelligence Analysts
Lecture: Dealing with Conflicting Data

Mini-Project #2 (Geo-Spatial Analysis) Due

- MON NOV 4 Reading 18 – Venn Diagrams – The How To
Lecture: Creating Venn Diagrams
- WED NOV 6 Reading 19 – Venn Diagram Worksheet
Lecture: In Class Exercise – Results of Venn Diagrams

- MON NOV 11 Reading 20 – Principles of Professional Ethics
Lecture: Writing & Briefing Intelligence Analysis Results
- WED NOV 13 Threat Intelligence Analysis Project Work Day
No Class (office hours available during class time)
- MON NOV 18 Reading 21 – First Responders Toolkit
Lecture: Assessing SARS
- WED NOV 20 Reading 22 – Tools for Mining Data and Visualization – a User’s List
Lecture: Analysts’ Tools, and Software

THREAT INTELLIGENCE ANALYSIS PROJECT DUE

- MON NOV 25 Reading 23 – Basic Info - Artificial Intelligence Systems
Lecture: Artificial Intelligence (AI, Fuzzy Logic, Predictive Systems)

(THANKSGIVING HOLIDAY – NOVEMBER 27 – DECEMBER 1)

- MON DEC 2 Reading 24 – The Future and Dark Data
Lecture: The Future of Intelligence Analysis and Ethics
- WED DEC 4 **LAST DAY OF CRIM 312 CLASS;** Wrap-up and Review for Final Exam
Readings 12-24 and class notes

FINAL EXAM – The final exam will be given sometime between Dec 11th – Dec 18th. The final exam schedule will be posted after the last day to add classes (September 3rd) on:
<https://registrar.gmu.edu/topics/final-exam-locator/>

The time, date, and location will also be announced in class once the information is posted by GMU.