Course Syllabus and Policy Requirement Statement

In order to access your course materials, you must agree to the following, by clicking the "Mark Reviewed" button below.

By checking the "Mark Reviewed" link below, you are indicating the following:

- You have read, understood, and will comply with the policies and procedures listed in the class syllabus, and that you have acquired the required textbook(s).
- You have read, understood, and will comply with class policies and procedures as specified in the online Student Handbook.
- You have read, understood, and will comply with computer and software requirements as specified with Browser Test.
- You have familiarize yourself with how to access course content in Blackboard using the Student Quick Reference Guide or CSS Student Orientation Course.

ISSA 3305 Intelligence Collection: Sources and Challenges

Course Description/Overview

ISSA 3305 will examine the fundamentals of intelligence collection, collection sources, methods, technologies and challenges. This course describes the intelligence collection process, the various intelligence disciplines, specific strengths of those disciplines, legal limitations on intelligence collection, and some significant weaknesses and vulnerabilities as well.

Intelligence collection is one of the critical steps in the overall intelligence cycle. Once an intelligence need is stated and validated, the intelligence tasking and collection process begins. Intelligence collection refers to the entire process of acquiring access to information resources using a variety of methods and techniques. Intelligence collection generates raw information that must be processed before analysts can use it. Collected raw data and information is processed through various means to render the raw data usable. During processing, foreign language materials are translated into English and other types of data and information are rendered into a form usable for analysts to evaluate and develop into various intelligence products and reports for intelligence consumers.

The United States Intelligence Community relies on a wide variety of potential resources for its intelligence collection efforts. These collection resources are divided into various collection disciplines or INTs. These collection disciplines are also categorized as either non-technical or technical depending on the techniques and means used to perform the collection effort and the type of information collected. Non-technical collection requires only human interaction with the collection resource and the data generated may require little or no further processing beyond translation from a foreign language into English. Non-technical collection methods involve interviews, interrogations, and the systematic research of publicly available information. Technical collection requires some equipment or technical means to access and exploit the collection source, and often requires advance processing techniques and technology to render the data usable for further analysis. Technical collection disciplines require a range of technical and technological solutions to gain access to data sources and to collect usable data once access has been gained.

The first three lessons provide a general course overview of intelligence collection and cover the non-technical intelligence collection sources and methods: Human Intelligence (HUMINT), and Open Source Intelligence (OSINT). The remaining lessons discuss several technical collection methods and technologies including: Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Geospatial Intelligence (GEOINT), and Measurement and Signature Intelligence (MASINT). The final lesson discusses a number of "hot topics" facing intelligence collection such as the challenges of the Global War of Terrorism, cyber-warfare, and intelligence information sharing between national, state and local authorities.
Collection management is the process that aligns intelligence needs with information collection and processing capabilities and assets within the various intelligence collection disciplines. The collection management process answers the needs of intelligence consumers while making the most economical and effective use of intelligence collection resources. As such, collection management has two distinct functions: Collection Resource Management and Collection Operations Management. Collection resource management aligns intelligence needs and priorities with available resources while considering budgetary constraints. On the other hand, collection operations management assigns specific collection tasks to a specific intelligence discipline or a specific system in order to make the most economic and effective use of the collection assets available.

This course will examine the background, capabilities, and limitations of each collection method as well as the capabilities and limitations of multi-source collection integration. The course focuses on the intelligence process, specific intelligence collection methods and technologies, unique collection challenges presented by of the Global War on Terrorism, and national, state and local intelligence collection integration and information sharing.

Click this link for a printable version of the syllabus.

Course Bibliography and Required Readings

The following textbook is required for this course. Other readings are assigned each week and are provided to you via a link in the course materials. Additionally, where possible, videos are utilized to enhance student learning.


Additional readings from online resources will be assigned for specific lessons.

Recommended Readings:

A note about recommend readings. The recommended readings are by definition not required, but are valuable for providing additional insights into the course topics. You may find them of value to have in hand for future courses, as reference/research materials.

Course Objectives/Learning Outcome

Objectives:

ISSA 3305 is designed for students to develop an understanding of and appreciation of intelligence collection methods, limitations, and capabilities, multi-source integration, and specific intelligence collection challenges with regard to the Global War on Terrorism. At the end of this course students will be able to:

1. Identify specific intelligence collection methods, capabilities and limitations; describe how intelligence collection fits into the overall intelligence process and supports the overall intelligence cycle.
2. Understand the collection management process and the distinction between collection resource management and collection operations management.
3. Understand the general sources and methods associated with the six primary intelligence collection disciplines to include the strengths and limitations of various intelligence collection platforms, sources and technologies.
4. Describe the importance and value of Human Intelligence (HUMINT) collection and understand the distinction between overt and covert HUMINT collection techniques.
5. Define open source intelligence (OSINT), its unique benefits and the challenges facing OSINT collection.
6. Describe Signals Intelligence (SIGINT), its three sub-disciplines and how SIGINT collection contributes to the overall intelligence picture.
7. Understand the difference between Imagery Intelligence (IMINT) and Geospatial Intelligence (GEOINT), the evolution of intelligence collection from imagery and geo-locational data and describe the capabilities and limitations of IMINT and GEOINT collection platforms.

8. Distinguish between strategic IMINT/GEOINT collection for national security purposes and tactical IMINT/GEOINT support to war fighters and law enforcement.

9. Describe Measurements and Signatures Intelligence (MASINT), its seven main sub-disciplines and the capabilities and collection technologies unique to MASINT.

10. Comprehend the intelligence collection challenges in a post-9/11 environment and how the intelligence community has adapted to these new challenges.

**Learning Outcomes:**

Students have a right to know what instructors are going to expect that they learn from a course of instruction and how their learning will be measured. This course establishes several learning outcomes that are measured subjectively. As a result of completing this course, students will be able to:

1. Express an "informed citizen's" understanding of the craft of intelligence collection to include identifying the role of intelligence collection in the overall intelligence process.

2. Describe in detail the six major intelligence disciplines, the capabilities and vulnerabilities of each discipline, and any sub-disciplines.

3. Describe the responsibilities of the various agencies within the intelligence community with regard to intelligence collection disciplines, techniques and technologies.

4. Analyze and appreciate the capacities of intelligence collection, the constraints within which it works, and its contribution to US national security.

5. Compare the intelligence collection process with other factors that impact national decision-making and distinguish the appropriate role of intelligence collection in a variety of policy circumstances.

6. Describe the key contributions intelligence collection makes to tactical support to warfighters and to law enforcement agencies.

**Assessment of Learning/Grading Policies**

**A Note on Grades:**

ISSA 3305 is a colloquium (meaning a group discussion, from the Latin Colloqui – to talk together—to have a conversation). As such, weekly participation in the discussion threads is expected and forms part of the grade. Final grades are composed as follows:

<table>
<thead>
<tr>
<th>Percent of Grade</th>
<th>Due</th>
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<tbody>
<tr>
<td>35%</td>
<td>Weekly.</td>
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<tr>
<td>25%</td>
<td>Sunday, Week 3</td>
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<tr>
<td>40%</td>
<td>Wednesday, Week 8</td>
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Grades will be based on the ability to organize the material, integrate relevant concepts and theories and present orally and in essay form the concepts of the course in mid-term and final evaluation examinations. You are expected to apply your own observations as necessary when demonstrating grasp of material.

**Student Essay Papers:** Each student will write 2 essays.

The **first essay** will be 4-6 pages and will be due at the conclusion of lesson 3. We will discuss the content of that essay during the first lesson.

The **second essay** will be your final exam and is a policy paper, which will be due during lesson 8. This document is more demanding of you because it will be an original essay dealing with issues concerning U.S. intelligence collection policy, capabilities, limitations and future directions. You will be provided several potential essay questions from which to choose. This essay is to be 10-12 pages.

**Guidance Concerning Paper Structure:** Your paper will address an issue affecting U.S. intelligence collection and national security. Approach this paper as if you are developing policy position for your boss to take to the Director for National Intelligence or a congressional hearing. Essays will contain four main sections, labeled as follows:

1. **Description** – Briefly describe the issue and provide background information needed for the subsequent sections (who, what, when, where, and how – set the conditions for your argument).
2. **Explanation** – Identify the main elements or “drivers” of this issue. What are the most important aspects, which, if resolved, could lead to a solution?
3. **Analysis** – This is the part of the paper where you examine the drivers and decide which ones are most important. In many cases, this will involve analytical and value judgments on your part. Most of the scholarly sources you have used will have already done this, so you should not find yourselves having to do so from scratch. It is acceptable to say that source A analyzes the issue this way, while source B analyses it another way. At the end of this section, state your position and justify your reasoning.
4. **Recommendations** – Make suggestions for resolving the issue. Critical thinking and imagination are applied here. These can be solutions you have developed on your own. They also can be ones you have read in your sources, as long as you reference them. As you develop your recommendation, imagine that you are answering the question for your boss, who is preparing to brief the President on your findings.

**Date of Final Exam**

Lesson 8 will be the final exam period.

Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale:

- A = 90 – 100 %
- B = 80 – 89 %
- C = 70 – 79 %
- D = 60 – 69 %
- F = 59 % and below.

**Course Organization/Learning Outcomes:**

**Lesson 1: Overview of Intelligence Collection.**

An introduction to the course; discussion of readings; introduction of key issues; the intelligence disciplines; the intelligence cycle; collection management; and statutory limitations on intelligence collection. How does intelligence collection fit into the overall intelligence production cycle?

**Learning Outcomes:**

- Identify specific intelligence collection methods, capabilities and limitations; describe how intelligence collection fits into the overall intelligence process and supports the overall intelligence cycle.
- Understand the collection management process and the distinction between collection resource management and collection operations management.
- Understand the general sources and methods associated with the six primary intelligence collection disciplines to include the strengths and limitations of various intelligence collection platforms, sources and technologies.
• Understand the distinction between and statutory limitations intelligence collection for national security purposes and intelligence collection for law enforcement purposes, and understand the need for protecting intelligence sources and methods.

Required Readings:

Recommended Readings:

Lesson 2: Human Intelligence (HUMINT).
This lesson introduces students to the Human Intelligence (HUMINT) collection discipline. It demonstrates the strengths of HUMINT collection as well as several potential vulnerabilities and limitations.

Learning Outcomes:
• Understand the importance and value of Human Intelligence collection and understand the distinction between overt and covert HUMINT collection techniques.
• Describe the Defense Attaché Service, the National Clandestine Service, the potential reliability issues and pitfalls of HUMINT collection and the potential moral and ethical questions associated with Human Intelligence collection.

Required Readings:

Recommended Readings:
• “Army MOS 35M Human Intelligence Collector” Online at: http://www.youtube.com/watch?v=ILH14APDaMg
• “Army MOS 35L Counterintelligence Analyst” Online at: http://www.youtube.com/watch?v=82N9F2j2E0Y

Lesson 3: Open Source Intelligence (OSINT).
Open-Source Intelligence (OSINT) is intelligence derived from the collection, processing and analysis of publicly available information. Nearly 90% of the information used in the production of intelligence estimates is derived
from unclassified, publicly available sources. OSINT has been a valuable source of information for centuries, but advances in communications technology, the expansion of the World Wide Web, and the proliferation of social media give access to an ever-expanding repository of information and make it possible to answer new intelligence questions through open source collection.

Learning Outcomes:
- Define open source intelligence, its unique benefits and the challenges facing OSINT collection.
- Comprehend policy issues related to OSINT collection and the roles and functions of the Open Source Center and the National Air and Space Intelligence Center in OSINT collection processing and dissemination.

Required Readings:

Recommended Readings:
- National Air and Space Intelligence Center (NASIC), Online at: http://www.afisr.af.mil/library/factsheets/factsheet.asp?id=20004

Lesson 4: Signals Intelligence (SIGINT).
The techniques of Signals Intelligence (SIGINT) collection take advantage of vulnerabilities in the communications and information gathering technologies of our adversaries. SIGINT is probably the most versatile of the technical intelligence disciplines. It can provide information not only concerning adversary capabilities and current operations, but also future plans and intentions.

Learning Outcomes:
- Understand how SIGINT collection contributes to the overall intelligence picture.
- Describe the three sub-disciplines of SIGINT.
- Understand the general capabilities of the various SIGINT collection platforms, and what service or agency operates them.
- Describe the primary producers and users of SIGINT.
- Comprehend the unique capabilities and strengths of SIGINT as well as its vulnerabilities.

Required Readings:
- “Air Force ISR Agency: All In...All the Time” Online at: http://www.25af.af.mil/News/Article-Display/Article/334428/air-force_isr_agency_commander_to_deploying_soldiers_were_all_in/
- Signals Intelligence, Marine Corps Warfighting Publication 2-22, online at: www.marines.mil/Portals/59/Publications/MCWP_2-22_Signals_Intelligence.pdf (Chapter 1, pp. 1-1 through 1-5)

Recommended Readings:
Lesson 5: Imagery Intelligence (IMINT) & Geospatial Intelligence (GEOINT).

You can tell a lot from a picture. Pictures are graphic, easily understood and compelling. Images can move public opinion and policy decisions in ways that words alone often cannot. Imagery intelligence (IMINT), or as it has become know more recently, geospatial intelligence (GEOINT) involves the collection and interpretation of images of various kinds to develop assessments of other nations' activities, capabilities and disposition of forces.

Learning Outcomes:
• Understand the evolution of intelligence collection from imagery and geo-locational data.
• Understand the difference between Imagery Intelligence (IMINT) and Geospatial Intelligence (GEOINT).
• Describe the capabilities and limitations of IMINT/GEOINT collection platforms.
• Distinguish between strategic IMINT/GEOINT collection for national security purposes and tactical IMINT/GEOINT support to war fighters and law enforcement.
• Understand the importance of commercial satellite imagery to the overall GEOINT collection process.
• Understand the role of the National Reconnaissance Office in imagery and geo-locational data collection.

Required Readings:
• “U-2 Reconnaissance Aircraft at Osan.” Online at: http://www.youtube.com/watch?v=Zv17lF60OHY

Recommended Readings:
• The Photographs that Prevented World War III http://www.smithsonianmag.com/history-archaeology/The-Photographs-That-Prevented-World-War-III-169802756.html?c=y&page=1

Lesson 6: Imagery Intelligence (IMINT) & Geospatial Intelligence (GEOINT) (Cont.).

Whereas the focus of the previous lesson was primarily on imagery and strategic imagery collection assets (U-2 aircraft and satellites) the focus in this lesson shifts to geospatial intelligence and tactical support to war fighters, homeland defense and law enforcement.

Learning Outcomes:
• Understand the difference between Imagery Intelligence (IMINT) and Geospatial Intelligence (GEOINT).
• Distinguish between strategic IMINT/GEOINT collection for national security purposes previously discussed and tactical IMINT/GEOINT support to war fighters and law enforcement.
• Describe the process of managing geospatial assets and the agencies involved.
• Identify the major advances in geospatial support to warfighters.

Required Readings:
• National Geospatial Agency, “The Power of GEOINT.” Online at: https://www.youtube.com/watch?v=1XI6nK58VB0

Recommended Readings:
• Beckhusen, Robert, “NASA Preps Drone Hurricane Hunters, but Misses Sandy.” Wired, Online at: http://www.wired.com/dangerroom/2012/10/hurricane-hunters/
• “RQ-4 Global Hawk Operations (2012)” Online at: http://www.youtube.com/watch?v=DN5i0-106Uo
• “Gorgon Stare” Online at: http://www.globalsecurity.org/intell/systems/gorgon-stare.htm

Lesson 7: Measurement and Signature Intelligence (MASINT).
Measurement and Signatures Intelligence (MASINT) is among the most technologically advanced but least understood intelligence collection disciplines. MASINT collection techniques encompass a wide variety of technologies and techniques including electro-optical, infrared, radio, laser and radar technologies, as well as collection from nuclear, acoustic and seismic sensors and gaseous, liquid and solid materials sampling for analysis.

Learning Outcomes:
• Describe Measurements and Signatures Intelligence (MASINT).
• Understand the seven main sub-disciplines of MASINT collection and their unique capabilities and collection technologies.
• Describe the role of the Central MASINT Organization in coordinating MASINT collection efforts within the Intelligence Community.
• Comprehend how MASINT collection contributes to law enforcement and the War on Terrorism.

Required Readings:
• VII. MASINT: Measurement and Signatures Intelligence, IC21: The Intelligence Community in the 21st Century, Staff Study Permanent Select Committee on Intelligence House of Representatives One Hundred Fourth Congress.

Recommended Readings:

Lesson 8: Continuing intelligence collection challenges: Policy; budget; and the Global War on Terrorism.
Much has changed for the Intelligence Community since the end of the Cold War, and especially since the terrorist attacks in 2001. Whereas the focus during the Cold War was on one nuclear capable adversary and collection priorities where relatively stable, the focus today has shifted to a myriad of interrelated topics and issues: terrorism, weapons of mass destruction, transnational crime, narcotics trafficking, etc. These issues do not stand alone, but are interrelated. For instance, the Taliban in Pakistan and Afghanistan use the profits from opium trafficking to fund their activities against NATO in Afghanistan. The near impossibility of separating such interrelated and fluid targets has made prioritizing and managing collection against those targets extremely difficult.

The Intelligence Community has adapted to this new environment by increasing the exchange of information and improving the interaction between national, state and local agencies. For instance, the Department of Homeland Security has established Fusion Centers to coordinate, correlate and disseminate information from national agencies
to state and local agencies. Despite these efforts, interagency rivalries and competition for funding continue to present challenges.

**Learning Outcomes:**

- Comprehend the intelligence collection challenges in a post-911 environment and how the intelligence community has adapted to these new challenges.
- Distinguish between Computer Network Exploitation and Computer Network Attack.
- Comprehend the role of Joint Terrorism Task Forces, Field Intelligence Groups and Fusion Centers in intelligence collection and dissemination to support National Security.

**Required Readings:**

- “US Army Intelligence and Security Command (INSCOM)” Online at: [http://www.youtube.com/watch?v=oxbxFuQVhho](http://www.youtube.com/watch?v=oxbxFuQVhho)

**Recommended Readings:**


**Additional On-line Intelligence Resources**

1. [The Literature of Intelligence: A Bibliography of Materials, with Essays, Reviews, and Comments](http://www.economist.com/), compiled by J. Ransom Clark of Muskingum College, is an exhaustive online compendium of intelligence literature divided by author and topic.
2. The CIA’s [Center for the Study of Intelligence](http://www.csmonitor.com/) publishes unclassified articles and conference proceedings.
3. The [Defense Intelligence Agency](http://www.csmonitor.com/) website describes the mission of the Defense Intelligence Agency. The history and public affairs pages on this site are particularly useful for gleaning unclassified information about Department of Defense intelligence activities.
4. Federal Bureau of Investigations [Directorate of Intelligence](http://www.csmonitor.com/) describes the intelligence collection, processing and dissemination duties and responsibilities of the Federal Bureau of Investigations. This site discusses intelligence primarily in the context of law enforcement.
5. [The Federation of American Scientists](http://www.csmonitor.com/) and the [National Security Archive](http://www.csmonitor.com/) also maintain useful web sites on intelligence topics.
6. Two useful intelligence journals are [Intelligence and National Strategy](http://www.csmonitor.com/) and the [International Journal of Intelligence and Counterintelligence](http://www.csmonitor.com/).
7. Daily media articles on current national security and intelligence, including- topics for Counterintelligence and Security Studies at [www.cicentre.com](http://www.cicentre.com/).

**Daily Knowledge**

*Staying Current and Informed about the World You Live in:*


**Communication**

**Participation**

In this class everyone, brings something to the table. Your ideas and thoughts do count, not only to me, but the entire class. Feel free to ask questions either via e-mail or the discussion board. Check the discussion board regularly. Many student questions are applicable to the class as a whole, as are the responses. You may be surprised how many of your classmates have the same questions and concerns as you. I may simply post your particular question on the discussion board and allow your classmates to provide the answer through their own posts.

To some, this may be their first online class and naturally, it could seem somewhat intimidating. As a class, we are together to help each other with this learning process and share our collective knowledge on how best to communicate; how to resolve technical issues that may arise (if we have the expertise), and to assist each other to find answers to our questions. We will learn and work as a team.

**Courtesy and Respect**

Courtesy and respect are essential ingredients to this course. We respect each other's opinions and respect their point of view at all times while in our class sessions. The use of profanity & harassment of any form is strictly prohibited (Zero Tolerance), as are those remarks concerning one's ethnicity, life style, race (ethnicity), religion, etc., violations of these rules will result in immediate dismissal from the course.

**Netiquette**

The on-line setting of our course promotes the advancement of knowledge through positive and constructive debate. Classroom based discussions between instructors and students and among students has traditionally been guided by the instructor. Discussions via the Internet, however, can occasionally devolve into insults and improper comments before the instructor has a chance to intervene.

Such activity and the failure to use proper etiquette and manners ARE NOT ACCEPTABLE in an academic setting and such inappropriate conduct IS NOT TOLERATED. Basic academic rules of good behavior and proper "Netiquette" are required and must prevail. Our on-line classroom is a place to enjoy the excitement of learning and does not include room for personal attacks on others or student attempts to demean or restrict the discussion of others. Note about the use of humor: Despite the best of intentions, jokes and especially- satire can easily be lost or taken seriously. Avoid the use of humor and/or satire in our academic setting.

**Office Hours/Contacting the Instructor**

See the Instructor Information section for contact information.

**University Policies**

**Academic Integrity** Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding and complying with the university [Academic Honor Code](http://www.angelo.edu/student-life/honor-code) and the [ASU Student Handbook](http://www.angelo.edu/student-life/handbook).
Accommodations for Disability
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation. Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student's responsibility to initiate such a request by emailing studentservices@angelo.edu, or by contacting:

Office of Student Affairs
University Center, Suite 112
325-942-2047 Office
325-942-2211 FAX

Student absence for religious holidays
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.