Critical Thinking and Intelligence Analysis

Course Description/Overview:

This course offers students an opportunity to explore how intelligence professionals, and their policy-making counterparts, critically think and endeavor to make well-informed decisions in a volatile world. Students study fundamental principles associated with thinking, decision-making, and judgment through the lens of national security. Two case studies provide opportunities to apply fundamental principles to extraordinary scenarios. Students learn to analyze and critically evaluate beliefs and actions, and then develop and defend reasonable positions, so as to influence others. Students will discover that a major aspect of critical thinking is well-analyzed intelligence appropriately tailored for the needs of policy making-consumers.

This course, while it is indeed national-security focused with an emphasis on intelligence and analysis, incorporates material from other disciplines to include leadership, psychology, economics, and business. Federal intelligence professionals; charged to enhance foreign, domestic, and homeland security; share many techniques and procedures with the law enforcement community. Business executives and managers, whose organizational survival depends upon knowledge, seek competitive advantage in close coordination with their business intelligence systems. Leaders within political action groups, nongovernmental organizations, private volunteer organizations, and even places of worship must decide what to believe and then decide what to do.

Ann entities are susceptible to lazy thinking, shoddy logic, cognitive bias, and faulty decision making. However, it is within the national security arena that adversaries deliberately generate confusion and purposefully try to deceive intelligence professionals and policy-makers. Enemy spies conducting espionage, and their counterintelligence counterparts who prompt poor decisions via the production of disinformation, certainly benefit from victims who do not embrace critical thinking.

Finally, this course is designed to be highly interactive, value your experiences and your well-thought-out positions and opinions, and to give you an opportunity to showcase your intellect. Different perspectives, ranging from traditional undergraduates to adult learners, should generate much energy and mutual learning.

Readings:

Required Text and Materials:


Information on additional readings will be provided and will be online. Required videos are provided online.
Course Objectives/Learning Outcome:

As a result of completing this course, the student will be able to:

1. Comprehend fundamental principles associated with thinking, decision-making, and judgment;
2. Apply fundamental principles associated with thinking, decision-making, and judgment to selected case studies;
3. Analyze and critically evaluate ideas, arguments, and points of view; and
4. Relate the impact of critical thinking to policy decisions.

Grading Policies & Assignments:

Grades will be based on the demonstrated ability to comprehend, apply, and analyze fundamental principles, integrate relevant concepts, and present them in appropriate forms. Weekly participation in the discussion threats is expected and forms a substantial part of the grade for this course.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percent of grade</th>
<th>Due date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Board</td>
<td>40%</td>
<td>Weekly with exceptions listed under Notes</td>
<td>Primary postings are due no later than 2359 Central Time on Fridays. Responses are due no later than 2359 Central Time on Sundays. There are no discussion questions for weeks 4, 6, and 8.</td>
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<tr>
<td>Midterm Presentations</td>
<td>20%</td>
<td>Sunday at end of week four (11 February)</td>
<td>Assignment consists of PowerPoint presentation (6-8 slides) and must be submitted no later than 2359 Central Time on the due date.</td>
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<tr>
<td>Midterm Critique</td>
<td>10%</td>
<td>Sunday at end of week six (25 February)</td>
<td>Each student will provide a critique of another student’s Midterm Presentation</td>
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<tr>
<td>Final Essay</td>
<td>30%</td>
<td>Wednesday during week eight (7 March)</td>
<td>The final essay is an 8-10 page paper to be submitted no later than 2359 on Wednesday, 7 March. Topics will be posted the beginning of week 6.</td>
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Early submissions for the three primary assignments are allowed, but do feel free to make use of the time allotted for each assignment. There are no extra points for early submissions.

Angelo State University employs a letter grade system. Grade 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
Failure to submit any major assignment may result in an incomplete (‘I’) being submitted. After a period of time, if not reconciled, an incomplete grade will be changed to an ‘F.’

**Grading Standards and Assignment Expectations:**

1. Work that is incomplete and inaccurate, which demonstrates an inability to apply information to actual situations, is not of passing quality;
2. Work that is complete and accurate, which demonstrates a basic understanding of the material, and perhaps an ability to apply information to actual situations at a fundamental level, is ‘C’ level work;
3. Work that is complete and accurate, which demonstrates a firm understanding of the material, and an ability to effectively apply information to actual situations at a high level, is ‘B’ level work;
4. Work that exceeds standards of completeness and accuracy, which demonstrates a superb understanding of the material, and an ability to apply and analyze material, is ‘A’ level work.
5. Weekly discussion posts should be a minimum of 250 words. They should use course material to fully address the question. While I will not be grading on the quality of citations in the discussion posts, it is a good time to practice how to correctly cite sources if you are unfamiliar with how to do so. Responses to initial posts must go beyond observations such as “nice post” or “you raise some good points” but actively engage the issue(s) raised by your classmate’s initial post. Failure to do so will result in a low mark for that week’s discussion post grade. Each response post should be a minimum of 150 words. Feel free to comment to more than two classmates, but that is not required.

**Course Organization/Learning Outcomes/Required Readings:**

This course is organized into four parts:
- Part I: Thinking about critical thinking
- Part II: Beating heuristics and biases
- Part III: Analyze and critically evaluate
- Part IV: Comparative look, analysis, and evaluation

**Part I: Thinking about critical thinking:**

**Lesson 1: Systems of Thinking**

**General Description of Subject Matter**
Quick thinking by our ancestors was certainly beneficial as threats emerged or fleeting opportunities for food and shelter surfaced. Quick thinking is still valuable. Encountering and responding to a hungry predator, deranged criminal, or unexpected lightning storm champions the timeless benefits of quick action over deliberation. We also retain a propensity for disciplined and reflective thought. This process of critical thinking, combined with quick thinking, helps us decided what to believe and then what to do.
Students, in this first lesson, are introduced to the central characteristics and functions of two mental systems. For our purposes, system one is conceptually defined as quick thinking while system two matches best to critical thinking. Students will demonstrate comprehension by explaining key principles and summarizing ideas, arguments, and points of view in a guided-graded discussion thread with the professor and classmates.

**Lesson Outcomes:**
1. Comprehend the two types of mental systems and distinguish the difference between quick and slow thinking.
2. Explain fundamental principles associated with thinking, decision-making, and judgment.
3. Summarize ideas, arguments, and points of view associated with thinking, decision-making, and judgment.

**Required Readings:**


**Lesson 2: Wonders and Limitations of Quick Thinking**

**General Description of Subject Matter**
Processes associated with quick thinking are based on establishing, maintaining, and updating the concept of normal. There is even a capacity, based on a standardized and stable anchor of expectations, for a predictable range of surprise and reaction. The mind constantly calibrates normalcy based on experiences, memory, expectations, and information flow. Unfortunately, this programming strength is also a source of weakness. Quick thinking can generate actions that are intuitive, appealing, and deadly wrong. This is especially dangerous when "normal" is being manipulated by adversaries who deliberately generate confusion and purposefully deceive. Students, in this second lesson, are provided the context behind the importance of cognitive bias. Students will demonstrate comprehension by explaining key principles and summarizing ideas, arguments, and points of view in a guided-graded discussion thread with the professor and classmates.

**Lesson Outcomes:**
1. Comprehend the function of mental system one in regards to quick thinking, decision-making, and judgment.
2. Explain fundamental benefits and limitations associated with quick thinking, decision-making, and judgment.
3. Summarize ideas, arguments, and points of view associated with quick thinking, decision-making, and judgment.
4. Relate the impact of critical thinking to policy decisions in the context of intelligence and national security.

**Required Readings:**
Part II: Beating Heuristics and Biases

Lesson 3: The Power of Scientific and Statistical Thinking

General Description of Subject Matter
Scientific and statistical thinking helps one predict, explain, and understand. Comprehending and leveraging concepts such as causation, probability, and data visualization are far more effective than making decisions based on anecdotal data or personal stories. Intelligence professionals and policymakers, who do not understand science and statistics, are forced to accept statistical interpretations and conclusions offered by others. This non-thinking scenario is dangerous. Manipulating statistically inept people is simple to do and frequently practiced by casinos, politicians, and advertisers. Likeminded intelligence professionals and policy makers are prey for quantitatively adept adversaries charged to induce faulty decision-making through distortion, data-rigging, withholding data, publication bias, and other such techniques. Students, in this third lesson, are introduced to principles of science and statistical thinking that contribute to superior thinking and analysis. Students will demonstrate comprehension by explaining key principles and summarizing ideas, arguments, and points of view in a guided-graded discussion threat with the professor and classmates.

Lesson Outcomes:
1. Comprehend fundamental principles of scientific and statistical thinking as they pertain to decision-making, and judgment.
2. Explain benefits and limitations associated with scientific and statistical thinking in regards to decision-making, and judgment.
3. Summarize ideas, arguments, and points of view associated with scientific and statistical thinking.
4. Relate the impact of scientific and statistical thinking to policy decisions in the context of intelligence and national security.

Required Readings:

Video Lecture by Ben Goldacre. TED: Battling Bad Science. View the video.

Lesson 4: Critical Thinking: The War to Beat the Bias

General Description of Subject Matter
Critical thinking is the key to good decision-making. Reflecting, questioning, being inquisitive, and logically assessing the quality of one's own thinking thwarts the dangers of cognitive bias. Critical thinking is also a fantastic defense against espionage, purposive deception by an adversary, and even one's own self-destructive thinking. Prussian theorist Carl Von Clausewitz championed the idea of critical thinking and believed it to be a requirement of senior officers. But critical thinking does not just happen. It is difficult to develop, nurture, and practice. Students, in this lesson, will first review the definition, conception, and FRISCO model of critical thinking as put forward by R. H. Ennis. Next, students will view a lecture on critical thinking and become armed with four critical thinking-centric tools for decision making. Both will prove useful for the duration of the course. The mid-term assignment, in the form of a PowerPoint presentation occurs during this lesson.

Lesson Outcomes:

1. Comprehend fundamental principles associated with critical thinking.
2. Explain fundamental principles associated with critical thinking.
3. Apply fundamental principles associated with critical thinking, decision-making, and judgment to actual situations.
4. Analyze fundamental principles associated with critical thinking, decision-making, and judgment by supporting generalizations in a presentation.
5. Relate the impact of critical thinking to policy decisions in the context of intelligence and national security.

Required Readings:
Sydney Finkelstein. "Think Again: Why Good Leaders Make Bad Decisions and How to Keep It from Happening to You." Tuck Alumni for Lifelong Learning (TALL), Tuck School of Business, Dartmouth. View the video.

Part III: Analyze and Critically Evaluate:

Lesson 5: A Modest Proposal (Case Study)

General Description of Subject Matter
This is the first of two case studies regarding the practice of critical thinking. Jonathan Swift produced this satire in 1729. It has been studied, worldwide, for centuries. The absurd nature of the proposal makes it a solid platform to practice foundational skills in disciplines such as decision-making, art of argument, ethics, philosophy, logic, religion, and critical thinking. Students in the aforementioned disciplines are most likely repulsed by the idea of eating the poor children of Ireland. However, it is not enough to just be offended. Critical thinkers must consider all issues, and then develop and defend reasonable positions, so as to influence others. Students, in this lesson, will apply foundational principles associated with critical thinking, decision-making, and judgment to the case study and then participate in a guided-graded discussion with the professor and classmates. Unpacking this carnage-centric satire serves as a building-block for the next real-world case study.

Lesson Outcomes:
1. Demonstrate an understanding of the facts in the case study.
2. Contrast the difference, between facts and the satirical nature of the case study, as both relate to principles associated with critical thinking, decision-making, and judgment.
3. Apply fundamental principles associated with critical thinking, decision-making, and judgment to the case study.
4. Analyze fundamental principles associated with critical thinking, decision-making, and judgment to the case study.

Required Readings:
Ahlersmeyer, Bob. "Enlightenment Era: Jonathan Swift - A Modest Proposal". Video Lecture (Part one: 00:00-8:30: Watch first eight-and-a-half minutes. Pause at 08:30, as directed, and read selection). Video.

Swift, Jonathan. 1799. A Modest Proposal For preventing the Children of Poor People From being a Burthen to Their Parents or Country, and For making them Beneficial to the Publick. Read on-line.


Lesson 6: Heaven's Gate (Case Study)

General Description of Subject Matter
This is the second of two case studies regarding the practice of critical thinking. This case, unlike the Swift satire, is real. Thirty-nine men and women, arguably capable of rational thought and reasonable decision-making, gleefully committed mass suicide in 1997. These UFO-believers had been convinced that suicide was a tool by which one could reach an alien spacecraft before Earth was purged. This case study is a bit closer to the intelligence-policy maker realm, than the 1729 Swift satire, but the foundational principles necessary to unpack via critical thinking are the same. Graduates of this program may not believe in UFOs or embrace the ideas of cults. However, their existence may require action from analysts and policy makers. Professionals must consider all issues, and then develop and defend reasonable positions, so as to influence appropriate reaction and responses to any scenario encountered. Students, in this lesson, will apply foundational principles associated with critical thinking, decision-making, and judgment to the case study and then participate in a guided-graded discussion with the professor and classmates.

Lesson Outcomes:
1. Demonstrate an understanding of the facts in the case study.
2. Contrast the difference, between facts and the satirical nature of the case study, as both relate to principles associated with critical thinking, decision-making, and judgment.
3. Apply fundamental principles associated with critical thinking, decision-making, and judgment to the case study.
4. Analyze fundamental principles associated with critical thinking, decision-making, and judgment to the case study.
5. Relate the impact of critical thinking to policy decisions in the context of intelligence and national security.

**Required Readings:**
This Day in History: March 26, 1997. *Heaven's Gate cult members found dead*.

*Heaven's Gate Cult Insider Story Full Documentary*. Subscription Free TV, Published 25 November 2015. Video.

**Lesson 7: Two Systems with One Purpose**

**General Description of Subject Matter**
This lesson champions the idea that critical thinking is the key to good decision-making and that it lessens the impact of cognitive bias. Dr. Linda Elder and Dr. Richard Paul provide a brief synopsis on becoming a critic of one's own thinking. Students, in this lesson, will collectively review and critique classmate's work produced in lesson four. In so doing, foundational principles associated with critical thinking, decision-making, and judgment, learned early in the course, will be enhanced via guided-graded discussions with the professor and classmates.

**Lesson Outcomes:**
1. Comprehend fundamental principles associated with critical thinking.
2. Explain fundamental principles associated with critical thinking.
3. Apply fundamental principles associated with critical thinking, decision-making, and judgment to actual situations.
4. Analyze fundamental principles associated with critical thinking, decision-making, and judgment by appraising and criticizing generalizations put forward in a presentation.
5. Relate the impact of critical thinking to policy decisions in the context of intelligence and national security.

6. **Required Readings:**

**Lesson 8: Final Essay-Exam**

Students must produce an 8-10 page essay-exam in week number eight. The purpose of this assignment is to measure student mastery of the course objectives. Standards of completeness and accuracy, which demonstrate the degree to which understanding and abilities to apply and analyze material, are formatively evaluated and assigned a numerical grade.

**End of Course Housekeeping**

**IDEA Student Surveys:**
Please help ASU leadership and the professor comprehend what you think of this course plus how the teaching and leadership style contributed to your achievements. Your reviews will determine the fate of the course and serve as a "report card" for the professor. It is best to address and solve issues, regarding
subject matter and classroom decorum, with the professor throughout the course. Please know that not responding can be as detrimental to the course and professor as a negative report.

**Assessment:**
Many courses at ASU are assessed for academic accreditation purposes. Your performance in this course may be evaluated against higher-level learning objectives. You will receive an e-mail if you, as a member of this course, are selected for assessment. Reported ratings have nothing to do with your grade or academic standing. They are consolidated with hundreds of other inputs so as to evaluate the department, college, and university.

**Communication**

**Office Hours/Contacting the Instructor**
Virtual. Contact me anytime via e-mail, blackboard message, phone, or text message. Most reliable way to contact me is via email, which I check daily. I work in a facility where I do not have access to my cell phone so calling is hit or miss. You may leave a message, however, if that works best.
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 and the ASU Student 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.