

Spring 2021

## **ISSA 3303 Critical Thinking and Intelligence Analysis**

### **Instructor:**

Jonathan Canedo  
jcanedo@angelo.edu  
410-353-3987

I do not have a local phone number and I am not located in San Angelo. Please no calls after 9pm Central Time. Sending me a text or an email message will be the most reliable way to get in touch with me.

### **Course Description/Overview:**

This course offers students an opportunity to explore how intelligence professionals, and their policymaking 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 critical 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.

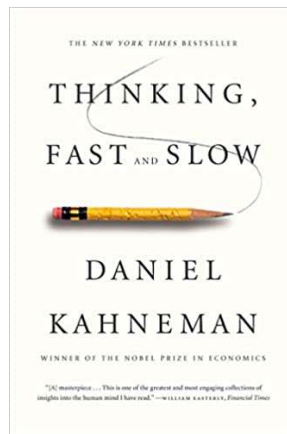
All entities are susceptible to lazy thinking, shoddy logic, cognitive bias, and faulty decision making. However, it is within the national security arena that adversaries deliberately generate confusion and purposefully try to deceive intelligence professionals and policy-makers. Enemy spies conducting 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.

## Course Readings:

There is one major required text for the class:

Kahneman, Daniel. 2013. *Thinking Fast and Slow* 1st edition. New York: Farrar, Straus and Giroux.

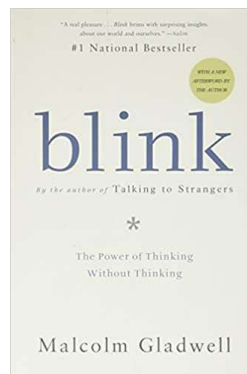


There is also one short pamphlet that I will provide to you via email and also through a link on the Blackboard page for the class:

Gary, Loren. 1998. *Cognitive Bias: Systematic Errors in Decision Making*. Harvard Management Update No. U9804B.

## Recommended Readings:

While not required reading, I highly recommend that you purchase Malcolm Gladwell's *Blink: The Power of Thinking without Thinking*. While Kahneman discusses the problems and issues with thinking fast and relying on what we think we know, Gladwell offers a nice counter-point in demonstrating how sometimes we just know something. Not quite jumping to a conclusion, but finding it difficult to easily articulate how we came to a conclusion. While Kahneman is excellent, I think together the two books provide a good introductory overview to the topic.



Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York: Back Bay Books.

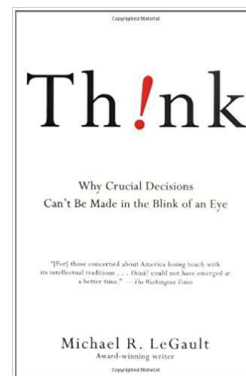
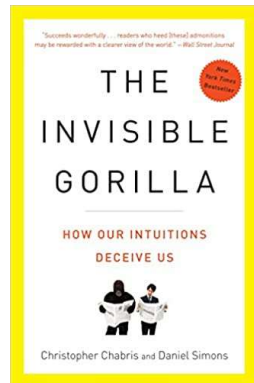
Gladwell, however, is not able to tell us when fast thinking is the right approach or why. Sydney Finkelstein and his co-authors, however, in the following book attempt to do so:

Finkelstein, Sydney, Jo Whitehead, and Andrew Campbell. 2009. *Think Again: Why Good Leaders Make Bad Decisions and How to Keep it From Happening to You* 1st edition. Cambridge, MA: Harvard Business Review Press.



Finkelstein is the speaker for the video in week 4 and he is really terrific. *Think Again* is essentially the book version of his lecture and it goes into far more depth than the lecture can.

Two other books that you may want to consider reading are:



Chabris, Christopher, and Daniel Simons. 2011. *The Invisible Gorilla: How Our Intuitions Deceive Us*. New York: Harmony.

LeGault, Michael R. 2006. *Think!: Why Crucial Decisions Can't Be Made in the Blink of an Eye*. New York: Threshold Editions.

The *Invisible Gorilla* builds on the video assigned in week 1. *Think!* Is a critique of Gladwell's *Blink* and it can be very helpful to read contrasting takes on a subject to develop a more rounded understanding of a topic. It is easy to just read one side, but that can lead us into mental traps.

Information on additional readings will be provided and will be online. Required videos are provided online. If you want some suggestions that specifically look at critical thinking, let me know and I can provide some.

## Course Objectives/Learning Outcomes:

*Objective 1:* Comprehend fundamental principles associated with thinking, decision-making, and judgment.

*Objective 2:* Apply fundamental principles associated with thinking, decision-making, and judgment to selected case studies.

*Objective 3:* Analyze and critically evaluate ideas, arguments, and points of view.

*Objective 4:* Relate the impact of critical thinking to policy decisions.

## Grading Policies:

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 threads is expected and forms a substantial part of the grade for this course. Discussion board posts are due each Friday evening, posted by midnight Central Time. Responses to your classmates' posts are due no later than the following Sunday by midnight Central Time. Posts time-stamped after the due times will be considered late.

Assignment	Percent of Grade	Due Date	Notes
Discussion Board Posts	40%	Weekly, with exceptions listed under notes	No discussion posts weeks 7 and 8
Individual Presentations	20%	Friday, at the end of week 4 (19 September 2021)	8-110 PowerPoint presentation. Details to follow
Presentation Critiques	10%	Friday, at the end of week 6 (3 October 2021)	Each student will provide a critique of another student's presentation
Final Essay	30%	Wednesday of week 8 (13 October 2021)	Essay, No longer than 8-10 pages, exclusive of cover page and bibliography. Details to follow

Angelo State University employs a letter grade system. Grades in this course are determined on the following 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.'

**Overall Expectations and Grading Standards:**

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; and
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.

**Discussion Board Post Guidelines:**

Each discussion board post should be, at a minimum, approximately 200 words, citing sources as appropriate. You do not need to use formal footnotes or endnotes. For the posts use in-line citations with author's last name, year of publication, and page number. For example, if you were quoting material from an article I wrote in 2015 and the material was on page 86 the citation would be: (Canedo 2015: 86). The citation goes immediately after where you include the cited information. Responses to your classmates' discussion posts should be approximately 100 words each. I will not word count your posts or responses unless they obviously look short. I recommend writing your posts and responses in Word or another program so that you can check spelling, grammar, and formatting. While these are not formal papers I do expect you to use proper formats. No partial sentences, unfinished thoughts, or informal language usage will be acceptable. Additional guidance will be provided as necessary.

Your discussion posts 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. Feel free to comment to more than two classmates, but that is not required.

**Writing Guidelines for Final Essay:**

Each writing assignment deals with the topic under discussion. Writing assignments should be 8-10 pages, with ten pages as a hard maximum. The goal of each assignment is not to have you write lengthy papers but to demonstrate understanding of the topic and the ability to concisely and adequately discuss it.

Make sure to use proper grammar, formatting, and styles for your papers. The preferred format is APA Style. Detailed instructions on APA Style can be found at: <https://owl.english.purdue.edu/owl/resource/560/01/>. Follow these guidelines with a couple of caveats: You do not need to use a page header/running head and you do not need to include an abstract for the assignments. Do use a title page and a separate page for your references. APA does not recommend the use of footnotes or endnotes, but you should use them in your papers. I prefer you use endnotes for citing where you explicitly use a source; footnotes should be used if you need to add an explanatory sentence or two that would not fit in your paper. I do not expect you to need to use footnotes.

You may also use Chicago Style if you choose, detailed information on the Chicago Style can be found at: <http://www.chicagomanualofstyle.org>. Regardless of what style you choose, make sure to be consistent within each paper. Otherwise, standard formatting applies: 1 inch margins, doublespaced, common font such as Times New Roman 12 point. Make sure to cite your sources appropriately. Please submit your writing assignments as Word documents. If you do not have access to Microsoft Word, please let me know so that we can make other arrangements (copy the paper directly into the assignment section of Blackboard for the appropriate week). Other formats will not be accepted.

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

This course is organized in 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: Two Systems of Thinking**

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 decide 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:**

Simons, Daniel, and Christopher Chabris. 2010. Selective Attention Test: (1:21). View the video.  
Kahneman, Daniel. 2013. *Thinking, Fast and Slow*. New York: Farrar, Straus, and Giroux. Chapters 1-5.

**Recommended Reading:**

Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York: Back Bay Books. Introduction and Chapter 1.

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

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, decisionmaking, and judgment.
2. Explain fundamental benefits and limitations associated with quick thinking, decisionmaking, and judgment.
3. Summarize ideas, arguments, and points of view associated with quick thinking, decisionmaking, and judgment.
4. Relate the impact of critical thinking to policy decisions in the context of intelligence and national security.

**Required Readings:**

Gary, Loren. 1998. *Cognitive Bias: Systematic Errors in Decision Making*. Harvard Management Update No. U9804B. Purchase a copy via the Harvard Business Publishing.

Kahneman, Daniel. 2013. *Thinking, Fast and Slow*. New York: Farrar, Straus, and Giroux. Chapters 6-9.

**Recommended Reading:**

Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York: Back Bay Books. Chapters 2-4.

**Part II: Beating Heuristics and Biases****Lesson 3: The Power of Scientific and Statistical Thinking**

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 policy-makers, 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, datarigging, 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 thread 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:**

Kahneman, Daniel. 2011. *Thinking, Fast and Slow*. New York: Farrar, Straus, and Giroux. Chapters 1-5. Review them.

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

## **Lesson 4: The War to Beat the Bias**

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 Reading:**

Finkelstein, Sydney. "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.

**Recommended Reading:**

Finkelstein, Sydney, Jo Whitehead, and Andrew Campbell. 2009. *Think Again: Why Good Leaders Make Bad Decisions and How to Keep it From Happening to You*. 1st edition. Cambridge, MA: Harvard Business Review Press.

Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York: Back Bay Books. Chapters 5-6.

## Part III: Analyze and Critically Evaluate

### Lesson 5: A Modest Proposal ... (Case Study)

This is the first of two case studies regarding the practice of critical thinking. Johnathan 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 decisionmaking, 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." Watch first eight-and-a-half minutes. Pause at 08:30, and read the below selection. After reading the selection, view the rest of the video.

Swift, Jonathan. 1729. *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 online.

### Lesson 6: To be Determined

## Part IV: Comparative Look, Analysis, and Evaluation

### Lesson 7: Two Systems with one Purpose

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.

#### Required Reading:

Elder, Linda, and Richard Paul. *Become a Critic of Your Own Thinking*. Foundation for Critical Thinking. Reading will be provided by instructor.

#### Recommended Reading:

Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York: Back Bay Books. Conclusion and Afterword.

### Lesson 8: Final Essay

Students must produce an 8-10 page essay-exam in week number seven. 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. Details will be provided via class announcements.

## 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](mailto: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.