Psychology 1500

Mythbusting: Distinguishing Fact and Fallacy in Psychology and Everyday Life Fall, 2011; T & T, GAB 406 at 3:30 and GAB 206 at 5

Instructor: Dr. Linda L. Marshall, Professor Email: Linda.Marshall@unt.edu

Office: Office hours: 2:30, T & T and by appointment

<u>Texts</u> – all are paperback

Levy, D. A. (2010). *Tools of Critical Thinking: Metathoughts for Psychology* (2nd ed). Waveland Press. Required and bring it to class once the readings start.

Schick, T. & Vaughn, L. (2007). *How to Think About Weird Things: Critical Thinking for a New Age* (6th ed). McGraw Hill. (Recommended)

Tavris, C. & Aronson, E. (2007). Mistakes Were Made But Not By Me. Harcourt Books. Required.

Objectives

TV shows mythbuster can be fun (or at least interesting). They do experiments to identify myths. We will learn specific types of thinking to identify myths. This course is on metacognition – thinking about thinking. You will discover how to use critical thinking skills in courses and everyday life. We are constantly exposed to increases in the amount and complexity of information, so the need to be adept at evaluating the quality of information increases. We all should be able to separate fact from fallacy to improve our own lives and to be responsible as family members, friends and citizens.

Traditional, experiential, and action learning methods will help you become a proficient mythbuster. This combination ensures everyone has an equal chance to master the material and skills if sufficient effort is exerted in class, in log entries and other assignments. By learning blocks to critical thinking and gaining the skills to counteract those blocks, students will gain flexibility that will help you successfully navigate life. All home and in-class assignments are designed to discover, identify, practice or emphasize the difficulty we face when judging the quality of information to which we are exposed.

This course is labor intensive. The rule of thumb for college courses, is that students should spend two hours outside of class for every hour inside class. So this course should take an average of about 9 hours each week.

Email and formatting - clinpsych@sbcglobal.net

The electronic files you send will be done in Microsoft Word and <u>must</u> have your last name in the title. The logs and assignments will be turned in as attachments via email. Every student should give me two email addresses in case there is a problem with one. The written assignments (logs and formal assignments) will be done using ½ to ¾ inch margins, single spacing and a 10 or 12 point font. Most assignments will be due at midnight. Be sure to follow instructions because failure to do so will result in points lost. clinpsych@sbcglobal.net

Grading Points – required, 225 possible points for requirements

Although grading is set up so everyone can earn an A, it is also easy to receive an F. Despite whatever else is done for this course, an F will result if either the log entries are not done or class is not attended regularly. Grading will be on a curve. Anything turned in late will be able to receive only half of the points possible.

- 30 pts for attendance; 1 point for presence at each class, ½ point if late or have an excused absence.
- 70 pts for homework log entries, including points for improvements in skilled thinking and explanation
- 40 pts for analytic essays; 10 points each for 4 written assignments (includes final one)
- 30 pts for family behavior, for involvement and contributions
- 25 pts for general improvement, considering entire course
- 20 pts for involvement, engagement, effort, and responsibility to self, peers and instructor
- 10 pts for critical evaluation of family members, free of all forms of response bias

Bonus points may be given to individuals who show outstanding behavior (e.g., consistently attending class and consistently turn in assignments on time with the work reflecting more than the minimum required).

Extra Credit: 10 pts earned by participating in or writing a research paper for insight into evaluating data resulting from research. Go to http://www.psyc.unt.edu/undergraduate/undergraduate-research.

Due Dates

Beginning September 1, log entries turned in every Thursday by midnight via email September 6, Implicit Associations Test Demo for Age and for Religion are completed https://implicit.harvard.edu/implicit/demo/

September 13, Analytic Evaluation Essay of your experience with 2 of the IAT study stimuli

September 13, Readings #1 due

September 22, Application log entries due for the first time and weekly hereafter

October 6, Analytic Evaluation Essay of a conservative columnist

October 20, Analytic Evaluation Essay of a liberal columnist

October 28, last day to drop

November 15, 17, 22, 29 and December 1, family presentations

December 6, Peer Evaluations due by midnight via email

December 8, Last Analytic Essay, Self-Evaluation due by midnight via email

December 8, entire file of log entries due by midnight via email

December 13 at 5 (class #2) or December 15 at 1:30 (class #1), post-test

Attendance – 30 points

You are REQUIRED to attend class because intense involvement and class practice is necessary to be able to break old habits and effectively develop the skills and habit of using critical thinking techniques. Written excuses must be emailed to me ahead of time if possible or a doctor's note given to me at the next class. See http://www.unt.edu/catalog/undergrad/enrollment.htm for UNT attendance policy.

You must sign your name on the sign-up sheet each and every day. If you are not listed on the sheet I collect for any given day, you will not receive an attendance point. To receive a half (1/2) point if you are late or leave early, you must sign for that day before you leave. In addition to excused absences as defined in the catalog, I must receive an email before class time if you are ill or have an unusual and unavoidable emergency.

Homework Logs – turned in weekly; 70 pts total (entire set turned in Thursday, December 8, midnight)

The purpose is to practice critical thinking by applying what you learn. Keep all entries in one word processing file. Add new entries at the end. Keep any notes written as feedback to you and simply add new entries after those notes. Logs will be sent via email. You may turn them in late twice without penalty.

The number of points earned will be based on the number of entries, breadth of entries (i.e., number of different areas/topics), writing clarity (i.e., degree to which any reader can understand the points made), depth of thinking, evidence of improvement in thinking and communication over time, and responsiveness to feedback. The Log will consist of at least 5 entries every week. Your log serves purposes of ensuring you practice what you are learning, show improvement, are involved in the course and are keeping up with class. Please do not write in any type of "short hand" or other abbreviations I may not understand. Date each entry and title it as Alternative Perspective, Changed Mind, or Application.

ALTERNATE PERSPECTIVE: Once every week describe a time when you purposefully attempted to take a perspective opposite to your "normal" reaction. Describe what you thought first, why you decided to use this situation to practice thinking in an alternative way, and describe what you think when you take the alternate perspective. That is, describe both the (original and alternative) content of your thoughts and the process you used to take an alternate perspective on the information.

CHANGED MIND: Once every week describe a time when you changed your mind or seriously considered changing your mind. Describe what you thought first, the information and/or experience that led you to reconsider what you thought, why or how the quality of that information led to your reconsideration, and, as much as possible, the thinking process you went through to come to the new opinion, belief or state of mind.

APPLICATION: At least 3 entries each week. Entries should consist of a description of the information or event to which you applied at least one critical thinking principle. Be sure to describe the source, the principle, and your conclusion. Focus on the experience of applying one or more of the principles that enhance mythbusting skills and improve your ability to overcome barriers to critical thinking.

When the readings start, the entries should be approached in one of two ways. 1) Start with a principle or tactic. Then look around your world for several examples in which that principle/tactic was evident during the day. 2) Start with something that catches your interest. Then evaluate it by showing how several of the

principles or tactics are functioning. In either case, describe the principle/tactic and explain your application sufficiently to make your thinking evident. Specific principles/tactics are listed in brackets in the reading list.

Analytic Essays – 10 points each

These essays will have a minimum of 500 words unless otherwise specified. Grading criteria include details involved in the format & appearance of the essay (e.g., no typos, margins as required, consistency of space after periods); technical details involved in appropriate writing (e.g., sentencing, paragraphing); the clarity and thoughtfulness of the content; the depth and thoroughness of the content; and how responsive it is to the assignment. A late assignment will receive no more than 5 points and may receive less. Three of the assignments are to help you learn to limit the effects of biases we have that are largely a function of the culture.

Implicit Associations Test, due 9/13, via email by midnight. To be an effective mythbuster we need to learn more about ourselves and culture. That is the purpose and function of Implicit Associations Tests. For this essay you will complete 2 of the tests on the website that will be assigned randomly when you login at https://implicit.harvard.edu/implicit/research/ and choose study. Which tests did you do? What were the results? What did you learn about yourself? How do the results compare with what you think you know about yourself (e.g., what was surprising, what was as you would expect)? What effect do the results have on the way you think about yourself and why? What does the experience imply about the culture?

October 6 and 20 due at midnight via email. Two of the assignments will be: Find a column in a newspaper or news magazine by a conservative (liberal) columnist from the list of names I give you. Not a blogger and not a TV or radio "personality." You will turn in the hard copy of the column which can be retrieved from the internet, although it must have appeared printed in a newspaper or news magazine. Find and identify: 1) The grain of truth and your alternate source for that truth, 2) misleading statements or lies and how you know they are misleading or lies, 3) Show which tactics and strategies referring each to class or the text, 4) List the sources you used to check for accuracy of the column's content and justify why you judged each source to be likely to have accurate information.

Final Assignment due at final time: Self-Evaluation in lieu of a final. This will be a minimum of 1000 words. Use critical thinking to evaluate the quality of your performance in all aspects of the class. Include attention to strengths, weaknesses, and change during the semester. Address all course requirements, including how you were affected by others in your family and how you affected them. Address your effort, involvement, and accomplishments in all aspects of the course. Include any issue that caused you to perform at a less than optimal level. Detailed information is necessary. Be sure to discuss ways you improved and evidence for that improvement. You may use this as a chance to influence your grade, but I will be most influenced by the quality of your thinking. You might want to keep notes during the semester to help prepare for this.

Family Behavior – 30 points

I will create 4 or 5 person families. You will remain with the assigned family all semester. You will work with your own family and communicate with other families. I expect members of each family to get to know each other and work together so that everyone gains experience learning from each other.

Each family is expected to be in communication with each other outside of class as well as during class. Family members are expected to be responsible to and for each other. Family members must be able to rely on each other for contributing to the family's tasks. It is everyone's responsibility to help the other family members improve their critical thinking skills. This is one other reason why attendance is required. It is not possible to be a responsible family member in absentia.

To be a responsible family member, you must work to ensure everyone participates in every task and that each person learns to participate in different ways. Each time a family task is presented to the class, it must reflect the combined contributions of everyone. It will not be sufficient for family members to simply present different parts of the task. Instead, it will be necessary for everyone to be flexible and to practice negotiation skills within their family.

General Improvement – 25 points

I will use five types of data to assign points for improvement. 1) Comparison of the first and last sets of log entries will show how much the quality and depth of thinking and expression has improved. 2) Students' overall self-evaluation describing ways their critical thinking improved and the number of points they would assign for their own improvement. 3) Family members' ratings of improvement. 4) The amount of difference seen by

comparing results on the standardized critical thinking tests. 5) My evaluation of improvement in class.

Responsibility, involvement, engagement, and effort – 20 points

Your critical thinking skills cannot improve without you being involved and engaged with the course content. exerting effort to master the skills, and behaving in a responsible way to yourself, classmates, and your instructor. As a college student planning to have a successful life, I expect you to have a strong sense of responsibility. For example, you are expected to learn and follow the requirements in the syllabus.

This class is weighted toward personal involvement and active learning. Therefore, each student has a variety of responsibilities to themselves and to all others. You are expected to critique tasks you do yourself, your family does and those done by other families. By learning to effectively critique your own and others' work, you will be improving your mythbusting skills as well as their mythbusting skills. Research from a variety of perspectives has shown that by helping another individual improve (e.g., their writing, they way they think or answer questions) you actually improve too.

Peer evaluation – 10 points

Every family member will evaluate the others in their own family on improvement in critical thinking skills across the semester. In addition, family members will rate each other on improvement in communication, quality of contributions, thoughtfullness of feedback to peers, quality of communication. Some ratings will be considered when assigning points for Family Behavior. Because this occurs at the end of the semester, your evaluations must show your critical thinking skills and ability to make judgments despite any bias you have about an individual. If response biases are evident (e.g., little variation in specific ratings for a specific individual or little variation in ratings across individuals), you will receive no points, your responsibility points may be decreased, and you will be ineligible for any bonus points that are available.

Readings - When we start Reading #1, you are expected to bring the text to class for reference.

#1 – Due 9/13 C1, Evaluative Bias of Language Description vs prescription.

#2 - Deception and Conceptualizing - Due 9/20

C2 & C3 - Reification Error; and Multiple Levels of Description A name doesn't make it real. Differing perspectives and "starting points."

#3 - Self-Deception and Conceptualizing – Due 9/27

C4 through C9 - Nominal Fallacy & Tautologous Reasoning, Dichotomous & Continuous Variables: Contrasting; Similarity & Uniqueness; Naturalistic Fallacy; and Barnum Effect 4-naming doesn't explain; repeating with different words doesn't convey information. 5-dichotomy vs continuum. 6-define by contrast with opposite. 7-similarities and differences (differences can obscure similarities & similarities can obscure differences). 8-common \neq good, uncommon \neq bad, common \neq bad, uncommon \neq good. 9-overly inclusive & generic interpretations.

#4 - Explaining - Due 10/4 C10 through C14 - Correlation & Causation; Bidirectional Causation; Multiple Causation; Degrees of Causation; and Different Causes, Same Effect

10-association \neq cause (what vs why); contiguity-causation error; 11-bidirectional causes. 12-multiple causes. 13-partial cause. 14-multiple pathways (different cause, same effect).

#6 – Misattributions – Due 10/11

C15 through C19 – Fundamental Attribution Error; Intervention-Causation Fallacy; Consequence-Intention Fallacy; If I feel it, it must be right; and Spectacular Explanation Fallacy

15-cognitive & motivational biases (e.g., just world, blame victim, illusion of control). 16-don't infer cause based on response to intervention. 17-a consequence does not reflect or imply intent. 18-feelings do not reflect or imply truth; memory can be true or false. 19-extraordinary events typically have common causes.

#7 – **Biases** – Due 10/18

C20 through C24 – Deductive & Inductive Inference; Reactivity; Self Fulfilling Prophecy; Assimilation Bias; Confirmation Bias:

20-deductive reasoning, inductive reasoning. 21-observing = disturbing. 22-expectations can create reality. 23-schema biases affect what perceptions (assimilation, accomodation, availability, belief perseverance, confirmation, hindsight, self-fulfilling prophecy). 24-looking for = finding, selectively gather information to confirm beliefs or question (disconfirmation not as salient as confirmation evidence).

#8 - More Biases — Due 10/25

C25 through 29 – Belief Perseverance; Hindsight Bias; Representativeness Bias; Availability Bias; Insight Fallacy

25-belief perseverance-discounting, denying, ignoring challenges (harder to change than create beliefs). 26-knew it all the time, retrospective clarity. 27-representativeness affected by invalid schema, underused base rates, small samples, misunderstood probability, motivational biases). 28-availability affected by salience, vividness, overgeneralizing, recency. 29-understanding \neq change

#9 - Decision Making - Due 11/1 C30 - Decisionmaking Trade-Offs

30-costs & benefits, pluses and minuses.

#10 - Summary - Due 11/8

Metathoughts Summary & Antidote Table – summary of critical thinking principles in text

POLICIES

This description is not to be interpreted as a contract. Plans for this course may be modified during the semester.

Cell phones, texting, ear buds, etc. will not be tolerated. If you must take a phone call, I will assume it is an emergency and expect you to have to leave class for the rest of that day.

You are expected to remain in class during each class period.

Lateness. For both attendance and assignments, lateness will result in losing half the points possible.

Incompletes. This course is more cumulative than most. Knowledge and skills gained in the course build on and use knowledge and skills addressed in previous classes and assignments. Moreover, students will be relying on each other for their own improvement. Consequently, it will be extremely difficult, if not impossible, to get an I. In any rare situation where an I is assigned, the student must complete the entire course again. It will not be possible to "make up" an assignment out of the context of the entire course.

Plagiarism and Cheating. Academic misconduct is very serious and will not be tolerated. This includes, but is not limited to looking at another person's exam, citing another person's ideas or using words without proper acknowledgement. Plagiarism and/or any form of cheating will be grounds for an F in the course and possible sanctions by the university. All students should be familiar with UNT's policies on academic misconduct.

ODA. UNT is committed to the spirit and letter of federal equal opportunity legislation. With passage of the Americans with Disabilities Act, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. I will not discriminate on the basis of a disability. Students must inform me of the need for reasonable accommodations and provide authorized documentation through administrative channels. See www.unt.edu/oda/apply/index.html, visit the Office of Disability Accommodation Union (room 321) or call (940) 565-4323.

Student Evaluation of Teaching Effectiveness. SETE is required for all organized classes. The short survey will be available at the end of the semester. By completing SETE you will be able to comment on how the class is taught and affect how I teach it in the future. Your feedback is very important to me. I consider SETE to be an important part of your participation in this class.