1. DESCRIPTION:

This course is designed to provide the student with tools for critical thinking and practice using them. The topics covered in critical thinking include acquiring the ability to assess scientific reasoning, acquiring a familiarity with the basics of categorical and sentential logic, especially their associated fallacies, acquiring an ability to detect informal fallacies in reasoning, and acquiring an ability to recognize some common errors in reasoning that have a psychological basis.

Credit Hours: 3

2. DESCRIPTION OF APPROACH:

Class size necessitates the traditional lecture format. However, a good amount of time will be devoted to analyzing examples and doing problems in class. I encourage students to ask questions when they are feeling confused.

3. OBJECTIVES

Fundamental Objectives
- Learning to analyze and critically evaluate ideas, arguments, and points of view.

Specific Objectives
- Learning to analyze scientific studies and scientific generalizations.
- Learning about errors in reasoning that have a psychological basis.
- Learning some basics about inductive and deductive formal logic and their associated fallacies.
- Learning to recognize and avoid informal fallacies in reasoning.

4. TEXTS

Bruce N. Waller - *Critical Thinking: Consider the Verdict (CTV)*, 5th edition

5. REQUIREMENTS

(1) 3 Tests (Test 1 & 2 worth 15% each, Test 3 worth 25%)
(2) Cumulative Final Exam (35% of Grade)
(4) Homework (10% of Grade) Much of Critical Thinking requires practice. So there will be many homework assignments. They will contribute to your grade in the following way. Anyone who makes an honest attempt at each and every problem will receive all the points. So it is easy to receive the whole 10% of the total grade. However, if even one problem is not attempted, you will receive no points for that assignment. No late assignments accepted.

6. EXTRA CREDIT
A Possible 5 points added to final grade (Note: These are due on or before April 30th and are open only to those who have attempted more than 50% of the homework assignments and missed no more than 3 classes.)

(1) Pick a substantive article from *The Skeptical Inquirer*, copies of which are in our library and online. Analyze the logic of the article by stating the conclusion argued for, the evidence presented, the assumptions made, the methods used, etc. Once you have distilled the argument, then you must explain your evaluation of the soundness of the argument—be specific! Up to 2 points toward overall grade; limit 1. Turn in a copy of the article with your analysis.

(2) The “Fallacy Hunt”: Find “classroom usable” examples of the fallacies we will be discussing, but no more than one advertisement. Look in newspapers. Editorial pages are probably full of them. The fallacies must be properly referenced, and you must analyze the argument and explain specifically how it goes wrong. Limit 2 to a customer; credit of up to 1 point each toward overall grade. Turn in the examples with your analyses.

(3) Visit [www.factcheck.org](http://www.factcheck.org) and describe three claims by a politicians, public figures, institutions, and advertisements that this website claims are either false, or distorted, or misleading. Explain how factcheck.org shows the claims are false. Up to one point for the three examples. NOT one point each.

7. SPECIFIC COURSE POLICIES

ABSENCES: In accordance with University regulations, I take roll every period. You are allowed 3 unexcused absences w/o penalty. You must attend class 75% the time or you will receive a failing grade. If you decide to stop attending class, please remember to drop the course or you will receive an F.

LATENESS or EARLY DEPARTURES: For those who are habitually late or leave early, I reserve the right to start taking ¼ point off his or her final grade for each time late.

MAKE-UPS: If one is necessary, it is likely to be longer and more difficult than the regular test. You must have a good reason for missing a test; having another test the same day, for example, does not count as a good reason. If you do miss a test, see me as soon as possible. Your excuse must be written out and appropriately documented. ANY EXCUSE THAT CANNOT BE VERIFIED WILL RESULT IN A GRADE OF ZERO FOR THAT EXAM. If you do have a valid excuse, then we should make the arrangements for you to take a make-up as soon as possible.

ACADEMIC DISHONESTY: Anyone caught plagiarizing or cheating on exams will receive an F for the course. I will use Turnitin.com to check for plagiarism.

CLASSROOM CONDUCT: Everyone in the classroom is expected to be respectful of others. Heated discussions are often excited and good, but the expression of disagreements should not stray too far from a constructive purpose. The professor reserves the right to ask a student to leave that class period. NO USE OF THE INTERNET DURING CLASS.

8. ADMINISTRATION POLICIES
STUDENT SYLLABUS GUIDELINES: Go to the following website for fuller information on the three policies that immediately follow below:

http://www.shsu.edu/syllabus/

RELIGIOUS HOLIDAYS: Students are allowed to miss class and other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Students remain responsible for all work. See Student Syllabus Guidelines.

NOTICE TO PERSONS WITH A DISABILITY: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should visit with the Office of Services for Students with Disabilities located in the Counseling Center. See Student Syllabus Guidelines.

ACADEMIC DISHONESTY: Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. See Student Syllabus Guidelines.

CLASSROOM CONDUCT: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students are to treat faculty and students with respect. Students are to turn off all cell phones while in the classroom. Under no circumstances are cell phones or any electronic devices to be used or seen during times of examination. Students may tape record lectures provided they do not disturb other students in the process.

VISITORS IN THE CLASSROOM: Unannounced visitors to class must present a current, official SHSU identification card to be permitted into the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor’s discretion whether or not the visitor will be allowed to remain in the classroom.

This policy is not intended to discourage the occasional visiting of classes by responsible persons. Obviously, however, the visiting of a particular class should be occasional and not regular, and it should in no way constitute interference with registered members of the class or the educational process.

REGISTERING FOR CLASS: I cannot add anyone to the course, for any reason whatsoever, after the deadline for adding. This policy holds even if you were dropped due to financial aid reasons.

Q-DROPS: A Q-Drop is one made after the 12th day of classes but before the last day for dropping without receiving an F. There is now a limit of 5 Q-Drops for each student’s undergraduate career at SHSU. This policy began Fall 2004. Q-Drops from other
institutions and Q-Drops that occurred before Fall 2004 are not counted toward the limit of 5. Students who have reached their limit can petition the Dean to for another Q-Drop. If refused, they must stay registered for the course.

INSTRUCTOR EVALUATIONS: Students will be asked to complete a course/instructor evaluation form toward the end of the semester. Starting in the Spring 2005 semester we will be officially using a new system of evaluation call ‘IDEA’.

9. GRADING SCALE
90-100 A
80-89 B
70-79 C
60-69 D
<60 F

10. TENTATIVE READING ASSIGNMENTS: I list the readings by number, not by date, to give us flexibility. I will assign homework in class. I am planning 3 tests and a final. I reserve the right to add or to modify reading assignments to accommodate time constraints or increased time availability.
NOTE: Always Bring Book to Class.

Readings
Topic 1: Scientific Studies
1. CTV, Chapter 16, pp. 370-377
2. CTV, Chapter 16, pp. 379-381
3. CTV, Chapter 17, pp. 423-425

Test 1

Topic 2: Arguments, Relevance and Burden of Proof
10. CTV, Chapters 1 and 2
11. CTV, Chapter 3
12. CTV, Chapter 4
13. CTV, Chapter 5

Topic 3: Arguments, Structure, and Logic
14. CTV, Chapter 6
15. CTV, Chapter 7, pp. 94-103
16. CTV, Chapter 7, pp. 109-114
17. CTV, Chapter 9

Topic 4: Truth
18. CTV, Chapter 12

Test 2
Topic 4: Informal Fallacies, Mistakes in Statistics
18. CTV, Chapter 10
19. CTV, Chapter 11
20. CTV, Chapter 13
21. CTV, Chapter 14
22. Handout: More Informal Fallacies
23. CTV, Chapter 17, pp. 416-18

Test 3

Topic 6: Psychological Pitfalls I
29. Selective Perception (Lecture)
30. Memory and Hindsight Bias (Lecture)
31. The Effects of Question Wording and Framing (Lecture)

Topic 7: Psychological Pitfalls II
27. Handout (Anchoring, etc.) (Lecture)

Final