I Review of Validity and Venn Diagrams

A. Check you answers for the Assignment on truth-tables and validity against those give on the last two pages this worship

B. Plenary discussion of any problems, review of validity and introduction using Venn diagrams as a test of validity for some arguments containing "quantifiers"

C. In small group use the Venn diagram method to determine validity or invalidity on the for argument of the following form:

a. (1) All A's are B's.
    (2) All C's are B's.
    ∴ All A's are C's

b. (1) All A's are B's.
    (2) All B's are C's.
    (3) m is an A.
    ∴ m is a C.

c. (1) All A's are B's.
    (2) All B's are C's.
    (3) m is a C.
    ∴ m is a A.

d. (1) All A's are B's.
    (2) No C's are B's.
    ∴ No A's are C's

e. (1) No A's are B's.
    (2) No C's are B's.
    ∴ No A's are C's

f. (1) All A's are B's.
    (2) Some C's are A's.
    ∴ Some C's are B's

D. Plenary discussion of the task

II Distraction Fallacies

A. The text distinguishes three types of distraction fallacies: **False dilemma**, **slippery slope** and **straw man**, **In pairs,** try to define or describe each fallacy discuss in turn. Pay particular attention to the distinction between false dilemma and straw man. Discuss which fallacies are found in the following passages and how the tend to persuade.

1. *You're either part of the solution or part of the problem.*

2. *In the early stages the compulsive gambler doesn't behave differently from the casual gambler. He plays a little poker on Friday night; he bets on the Sunday football games. Slowly, he begins to bet more. Winning becomes the high point of his week. A loss means several days of depression. Finally, he runs out of his own money and is forced to get it any way he can. He begs, borrows, and ultimately steals. Beware! That first flip of the coin can spell disaster.*

3. *I'm in favor of legalized gambling. There are those who oppose it, but they apparently think that anything that's fun is sinful.*

4. *If you're not going to save a lot of money on fuel, then you might as well not waste the effort. Putting weather stripping around your doors doesn't save you that much.*

B. Plenary

III. Resemblance Fallacies

A. The text distinguishes four types of resemblance fallacies: a**ffirming the consequent, denying the antecedent**, **begging the question** and **equivocation In small group** try to define or describe each fallacy discuss in turn. Pay particular attention to equivocation and begging the question Discuss which fallacies are found in the following passages and how the tend to persuade.

1 *If Alvin really loved Alice, then he would have given up his evil ways. He does seem to have reformed—he's even quit hanging out in bars and doing drugs. He must really love Alice.*

2 *Callous though it sounds, I do not believe we have an obligation to redistribute wealth to the less fortunate. The reason that I believe this is that what a person earns is rightfully hers. No one else has a claim to it.*

3 *It won't be dangerous to ride with Gary, because he hasn't been drinking. If he had been drinking, it would be dangerous.*

B. Plenary discussion of a Sample Argument:
   Supplement on equivocation--Procedure for diagnosing <u>equivocation</u> (See Ch7 pp 176-178)
           a.Write argument in standard form.
           b.Circle unclear expression that occurs in two premises.
           c.Identify what the expression must mean to make one of these premises
             acceptable. (Substitute a phrase for the unclear expression).
           d.Determine whether the other premise is acceptable if the expression is interpreted in the same
             way.--IF THE EXPRESSION MUST SHIFT IN MEANING TO MAKE BOTH PREMISES
             ACCEPTABLE, THE ARGUMENT IS GUILTY OF EQUIVOCATION-

    (1) Getting married involves promising to live with a person for the rest of one's life.
    (2) No one can safely predict compatibility with another person for life.
    (3) If two people aren't compatible, then they can't live together.   I
    (4) No one should make a promise unless she or he can safely predict that she or he can keep it.

   ∴ No one should get married

C. In small group, apply these procedure to one of these to examples:
       a *Most students go to college to improve their job prospects. But the fact is that many areas of
         study particularly the liberal arts, don't strike students as preparing them for a vocation.
         They fail to see that living a life enriched by ideas is a kind of vocation. So when they quit
         college to get a job they are making a big mistake.*
                       (Interpret argument as: Students want college to prepare them
               for a vocation. Living a life enriched by ideas is a vocation. College
               prepares you for a life enriched by ideas. So college does prepare
               students for what they want.)

       b. Jan is emotionally disturbed, and emotionally disturbed people shouldn't be allowed to
         own guns. So Jane shouldn't be allowed to own guns.
    D. Plenary discussion of two examples

IV Fallacies of illegitimate appeal to emotion
       A. Plenary: A third category of fallacies are those that involve an illegitimate appeal to emotion:
         appeal to pity, **appeal to force** and **prejudicial language.** The main issue in judging
         whether these fallacies occur is determine whether an appeal to emotion is reasonable.
         Your partner says: "You shouldn't leave me, because it would break my heart." A fallacious
         appeal to emotion? Why or why not?

         Compare/contrast to: "It breaks my heart that you don't believe I tried as hard as I could." (So
                         you should believe I tried as hard as I could.)
            Preview: Three Emotion Fallacies
     1. Appeal to pity
       a)It would make me unhappy if you called my serve "out", so it's in. (Fallacy)
       b) It would make me unhappy if you called my serve "out", so you should call it
         "in." [Not a fallacy, but...]
      2. Appeal to force
       a) They'll vote me out of office ill decide that abortion is morally permissible, so abortion
         is wrong. (Fallacy)
       b) They'll vote me out of office if I decide that abortion is morally permissible, so I
         should take anti-abortion as my official position. [Not a fallacy, but...]
       [Note: A fallacy can be committed either in presenting or in accepting an argument.]

  B. In small group try simplify each of the following argument and rewrite it in two versions parallel to
    those just given in the section above

1. I've poured my soul into the task of writing this novel. I've worked on it late at night after spending the day on my regular job. I've endured rejections, gone through revisions, and at last it's published. What do you think about it?

2 Do I need to remind you how difficult it might be if you decide that you won't go out with me? After all, I make personnel decisions around here.

V. Fallacies that cause "Double Trouble"

A. In small group discuss the following passages that contain one of the two fallacies we call "double trouble:" Argument from Authority; Attacking the person (*ad hominem*). As with other fallacies, not all cases of citing authority or raising questions about the person presenting the argument are fallacies. The opinion of authorities should carry weight for the critical reasoner in a variety of contexts.

1. I believe the economic issue is the important one in this election. I don't know that much about economics myself, but my mother-in-law teaches economics and my uncle has run a large business for years. I've talked it over with them, and I think that the Republican candidate would probably do a better job of guiding the country's economic policies.

2. Here you are quoting Ben Franklin on the subject of how one should live his life. But what kind of a life did Franklin himself live? I've read that he was a very difficult man, prone to depression, hard to please, impatient with those around him. When you judge a man's philosophy you have to see how it worked for him

B. Plenary Discussion

VI Identifying Fallacies

A. In Small group discuss whether following statements commit any of the fallacies discussed in chapter 6? If so, which one(s). Why do you think they are fallacies

1. You've been contradicting everything I say. The point I'm making is an obvious one. A National health program will ruin the quality of medical practice.

2. Anyone who serves as president of this organization has a duty to promote its interests that's written in the charter. Supporting gender equality goes against the interests of this organization. A duty is, by definition, a moral obligation. So as president of this organization, I have a moral obligation to oppose gender equality. Actually, this is an obligation I am happy to fulfill, because I firmly believe that gender equality is a dangerous idea. You can predict the kind of behavior it will produce in women generally if you look at the angry, hysterical, man-hating females who are leaders of this movement. I would argue that the gentle, ladylike demeanor which is befitting of womankind will all but disappear if the feminists succeed in promoting their cause.

1. Tina has never had a Teddy Bear. A mother's love. A doll to cuddle. Tina knows nothing of these things. But she does know fear, rejection, and hunger. For just $15 a month, you can help save a child like Tina. Through our "adoption" program you can help provide a child with a better diet, clothes, medical attention, school. And even a toy or two. But don't wait. There are so many. And somewhere, right now, a child is dying from starvation and neglect.

B.. In Small Group Reconstruct the argument in the Michelle Malkin essay presented below. Does it commit any fallacies? If so, which ones.

➤ Assignment for Tuesday May 2. **No new Reading for Morning Session. Review Ch. 1-6 (and 7 to p. 185). Read the remainder of Ch. 7 for the afternoon sessions (but this additional material will not be on the exam Submit:** Exercises 6.1 f, h, j; 6.2 #1 f,h #3 a,c,g,h, Exercise 6.3 # 2,#4,#6; Exercise 6.4 #2b,d,f,h Exercise 6.5 #2, #4, #8; Exercise 7.1 #2 b, d **(EXTRA CREDIT,** Exercises on using Venn diagrams Exercise 5.4 #1 f, #2 d, f, #3 b, d, f)

The Wall Street Journal: Bordering on Idiocy, Michelle Malkin,3/25/02

What does combating illegal immigration have to do with combating Middle Eastern terrorists in America? Well, duh.

Let's review: Three of the 19 Sept. 11 hijackers were illegal visa overstayers. Seven of the 19 obtained fraudulent ID cards with the help of illegal alien day laborers in Virginia. Two of the 1993 World Trade Center bombers were illegal aliens. At least two bin Laden-linked bomb plotters attempted to cross illegally through our land borders. More than 115,000 people from Middle Eastern countries are here illegally. More than 1,000 of them were smuggled through Mexico by convicted global crime ring leader George Tajirian. And some 6,000 Middle Eastern men who have defied deportation orders remain on the loose.

The connection between illegal immigration reform and homeland security is now fantastically obvious to most Americans, but the loose-and-open borders crowd is as blind and dumb as ever. Leading the senseless is the Wall Street Journal editorial page, which I admired in the past for its stalwart promotion of the rule of law and abhorrence of race-card demagoguery. On March 18, the paper betrayed both principles with disturbing flippancy.

"So Atta got his visa. That's no reason to kick out Mexican workers," pooh-poohed an online summary of an editorial titled "Immigrants and Terrorists." In it, the Journal's unrepentant open borders proponents approve of bipartisan efforts -- foolishly embraced by President Bush and favored by Mexican president Vicente Fox -- to extend partial amnesty to hundreds of thousands of illegal aliens who have been in the country since 1998.

The so-called 245(i) provision of federal immigration law will allow illegal aliens who have found employer or family sponsors to obtain visas in the U.S. for a $1,000 fee, instead of being forced to return home - where consular offices would thoroughly scrutinize their native criminal records before approving applications. The 245(i) program would also allow these applicants to bypass a 1996 federal law barring illegal aliens from re-entering the U.S. for up to 10 years.

The manner in which the Bush administration initially attempted to ram this proposal through - by a stealth "cloaked" vote - was cravenly Clintonesque. But not a peep of complaint was heard from the Journal on that. Instead, the editorial board lambasted principled conservative critics of 245(i) such as Rep. Tom Tancredo (R-Colorado) for "scapegoating" Mexicans who "bus tables." Drop the Jesse Jackson imitation, guys. This isn't just about innocent Mexican bus boys. The amnesty would be extended to any law-breaking alien from any country who can hustle up an American employer or "spouse" and pay a good immigration lawyer to cook up an eligibility claim.

Section 245(i) is not a family values plan. It is a law-enforcement evasion plan.

The Journal says it doesn't want to overburden consular offices abroad. But what about the dangerous bureaucratic onslaught this program is causing here at home? As we have seen in the past, amnesty is an open invitation for marriage fraud, document fraud, endless litigation, and swamped adjudications offices. It is also a known loophole for terrorists. At least one al Qaeda-linked operative, convicted in the 1993 World Trade Center bombing plot, obtained amnesty through a program intended for farm workers. Who knows how many more are now lurking among us as amnestied American citizens?

The Journal editorial board and its ilk perpetuate a perilous myth -- that we can continue to reward "good" illegal immigrants streaming across the borders while keeping the "bad" illegal immigrants out. "There's always a chance that terrorist cells lie dormant among these folks," the Journal concedes. But even after the heinous murder of 3,000 people in its backyard at the hands of these sleepers who slipped through, the New York-based paper is far more concerned about not wanting to "upend the lives of Mexican nannies in San Diego."

This takes the cake. While the Wall Street Journal editors and their border-crashing allies remain obsessed with protecting illegal Mexican workers from the slightest inconvenience, the lives of countless American soldiers and their families across the country have been "upended" in the war on terror to ensure that we remain a safe and sovereign nation. Which side are our friends at the Journal on, anyway?

Exercise 5.1 #1 b, d, f, h , #2 b, d, #4 b,d

1b. A → B;   1d. A ∨ B;   1f. A & B;   1h. A ↔ B;

2b. A & (B → C), where B stands for the statement "Drug arrests decrease";

4b. (1) A → B.
    (2) B → C.
    (3) C → D.
    ∴ A → D

4d (1) A ↔ (B & ¬ C)
    (2) C ∨ D
    (3) E → ¬D
    ∴   E → ¬A

Exercise 5.2 #2, #3 b, d, f

2a. A → ¬B
     F   F
       T
       T
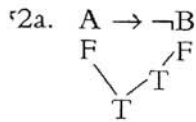
Initial Assignment
Row 2 Negation
Row 3 Conditional

3b. (A & B) → C
     F   T   T
      F   T
         T
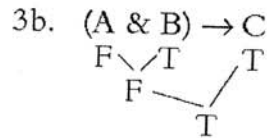
Initial Assignment
Row 3 Conjunction
Row 3 Conditional

2b. ¬B → A
      F   F
     T   F
        F
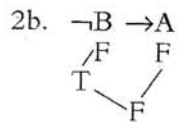
Initial Assignment
Row 2 Negation
Row 2 Conditional

3d. A → (B → C)
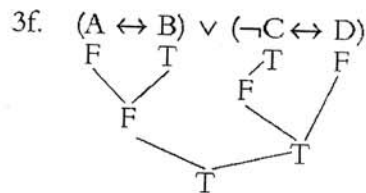   F   T   T
       T   T
       T
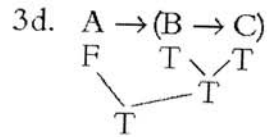
Initial Assignment
Row 1 Conditional
Row 3 Conditional

2c. ¬(A & ¬B)
      F   F
        T
       F
     T
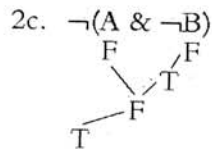
Initial Assignment
Row 2 Negation
Row 3 Conjunction
Row 2 Negation

2d. ¬A ∨ ¬B
      F   F
     T   T
        T
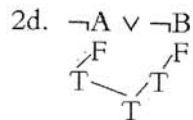
Initial Assignment
Row 2 Negation
Row 1 Disjunction

3f. (A ↔ B) ∨ (¬C ↔ D)
     F   T   T   F
        F   F
          T   T
            T

Initial Assignment
Row 1 Negation
Row 3 Biconditional
Row 4 Biconditional
Row 3 Disjunction

Exercise 5.3 #1 a #2 b. #3 b. f. g. l.

1a.

A	B	Premises		Conclusion
		$A \to B$	$\neg B$	$\neg A$
T	T	T	F	F
T	F	F	T	F
F	T	T	F	T
T	F	(T	T)	T

Note that all premises are true in the fourth line only and that the conclusion is also true in this situation. Therefore, the argument is valid.

2b.

A	B	C	Premises			Conclusion
			$A \to B$	$B \to C$	$\neg A$	C
T	T	T	T	T	F	T
T	T	F	T	F	F	F
T	F	T	F	T	F	T
T	F	F	F	T	F	F
F	T	T	T	T	T	T
F	T	F	T	F	T	F
F	F	T	(T	T	T)	T
F	F	F	(T	T	T)	F x

Invalid. Note the last line.

3b.

A	B	Premises		Conclusion
		$A \to \neg B$	$\neg B$	$\neg A$
T	T	F	F	F
T	F	(T	T)	F x
F	T	T	F	T
F	F	(T	T)	T .

Invalid. Note the second line.

3f.

A	B	Premises	Conclusion
		$A \vee B$	$\neg B \to A$
T	T	(T)	T
T	F	(T)	T
F	T	(T)	T
F	F	F	F

Valid. The premise is true in the first three lines, and so is the conclusion. Again, note equivalence.

3g.

A	B	C	Premises		Conclusion
			$A \vee B$	$B \to C$	$\neg A \to C$
T	T	T	(T	T)	T
T	T	F	T	F	T
T	F	T	(T	T)	T
T	F	F	(T	T)	T
F	T	T	(T	T)	T
F	T	F	T	F	F
F	F	T	F	T	T
F	F	F	F	T	F

Valid. Both premises are true in the first, third, fourth, and fifth lines; the conclusion is true in these lines also.

3l.

A	B	C	Premises		Conclusion
			$A \to (B \vee C)$	$A \,\&\, \neg B$	C
T	T	T	T (T)	F (F)	T
T	T	F	T (T)	F (F)	F
T	F	T	T (T)	T (T)	T
T	F	F	F (F)	T (T)	F
F	T	T	T (T)	F (F)	T
F	T	F	T (T)	F (F)	F
F	F	T	T (T)	F (T)	T
F	F	F	T (F)	F (T)	F

Valid. Note that the values in parentheses are intermediate.

3n.

A	B	C	Premises		Conclusion
			$-A \vee B$	$(-B) \vee C$	$-C$ $-A$
T	T	T	(F) T	(F) T	F F
T	T	F	(F) T	(F) F	T⁎ F
T	F	T	(F) F	(T) T	F F
T	F	F	(F) F	(T) T	T F
F	T	T	(T) T	(F) T	F T
F	T	F	(T) T	(F) F	T T
F	F	T	(T) T	(T) T	F T
F	F	F	(T) T	(T) T	T) T

Valid. Note that only the last line has all the premises true. The conclusion is also true. The values in parentheses are the intermediate steps for the negations. Given the logical equivalence of $\neg A \vee B$ and $A \to B$, this argument can be seen as an extended version of *modus tollens*.