Instructors:
Tiffany L. Hutchins, Ph.D.
406 Pomeroy Hall
PH: 318-3121 (cell)
Tiffany.Hutchins@uvm.edu
Office Hours: TBA

Keith Franchetti, CCC-SLP
406 Pomeroy Hall
PH: 310-2794 (cell)
Email: Kef.slp@gmail.com
Office Hours: Mondays: 7:45 – 8:45 PM

PREREQUISITES: Psych 109 or 101 or permission of the instructor.


SUPPLEMENTAL READINGS: Supplemental readings *may be* assigned throughout the semester as needed. If supplemental readings are deemed necessary, your understanding of these readings may be assessed on exams. These will be available through electronic reserve.

EDUCATIONAL OBJECTIVES: The educational objectives of this course are to familiarize students with the study of cognition and language in terms of mental representation models, models of memory and theories of language comprehension and production. This course is designed to help students understand language in order to place language in biological, behavioral, and social contexts. In doing so, students will gain an understanding of the cognitive underpinnings of language including those processes involved in perception, attention, memory and other higher cognitive and executive functions. As such, this course meets the following standards as described by the American Speech, Language, and Hearing Association (ASHA): Standard III-B: Knowledge of basic human communication including their biological, psychological, developmental and linguistic and cultural bases.

SCHEDULE OF LECTURES, READINGS and EXAMS:

<table>
<thead>
<tr>
<th>Date</th>
<th>Tentative Agenda</th>
<th>Readings/Assignment Due Dates</th>
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<tbody>
<tr>
<td>Jan. 14 Hutches</td>
<td><strong>Introduction to Cognition and Language</strong>&lt;br&gt;<strong>The nature of language</strong>&lt;br&gt;FILM: Colorless green ideas…</td>
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<tr>
<td>Jan. 21 Hutches</td>
<td><strong>NO CLASS: Martin Luther King Day</strong></td>
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<tr>
<td>Jan. 28 Hutches</td>
<td><strong>Are there non-human languages?</strong>&lt;br&gt;<strong>The Evolution of language</strong>&lt;br&gt;Theories of grammar</td>
<td>Chapters 1 &amp; 2</td>
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<tr>
<td>Date</td>
<td>Instructor</td>
<td>Topics</td>
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<tr>
<td>Feb. 4</td>
<td>Hutchins</td>
<td>Theories of grammar continued, FILM: Playing the language game</td>
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<td>Feb. 11</td>
<td>Hutchins</td>
<td>Memory</td>
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<td>Feb. 18</td>
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<td>NO CLASS-President’s day</td>
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<tr>
<td>Feb 25</td>
<td>Franchetti</td>
<td>EXAM ONE, Language and thinking</td>
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<tr>
<td>March 3</td>
<td>Franchetti</td>
<td>Language and thinking</td>
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<td>March 10</td>
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<td>NO CLASS: Spring break</td>
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<tr>
<td>March 17</td>
<td>Franchetti</td>
<td>Modular and PDP models of the mind</td>
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<td>March 24</td>
<td>Franchetti</td>
<td>Phonology, The recognition of spoken words</td>
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<td>March 31</td>
<td>Franchetti</td>
<td>Categorical perception</td>
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<td>April 7</td>
<td>Franchetti</td>
<td>EXAM TWO, TBA</td>
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<td>April 14</td>
<td>Franchetti</td>
<td>Visual word recognition</td>
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<td>April 21</td>
<td>Franchetti</td>
<td>Sentence processing</td>
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<td>April 28</td>
<td>Hutchins</td>
<td>Thinking about knowing</td>
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<td>Monday, May 5: 7:00 – 9:00 PM</td>
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<td>EXAM THREE</td>
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**COURSE GRADING:**

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<tr>
<th></th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Citizenship</td>
<td>50</td>
<td>5 %</td>
</tr>
<tr>
<td>Thought papers (7 X 25)</td>
<td>175</td>
<td>17.5 %</td>
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<tr>
<td>In-class assignments (7 X 25 points)</td>
<td>175</td>
<td>17.5 %</td>
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<td>Exams (Total):</td>
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<tr>
<td>In-class exam #1</td>
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<td>In-class exam #2</td>
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<td>In-class exam #3</td>
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<td>20 %</td>
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<td><strong>Course Total:</strong></td>
<td>1000</td>
<td>100 %</td>
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Final course letter grades translate from the course work percentage table below.

- 98.0% - 100% A+
- 94.0% - 97.9% A
- 90.0% - 93.9% A-
- 87.0% - 89.9% B+
- 84.0% - 86.9% B
- 80.0% - 83.9% B-
- 77.0% - 79.9% C+
- 74.0% - 76.9% C
- 70.0% - 73.9% C-
- 67.0% - 69.9% D+
- 64.0% - 66.9% D
- 60.0% - 63.9% D-
- below 59.9% F
COURSE REQUIREMENTS:

1.  Expectations and Attendance: You are expected to read all assignments prior to each class (see above for a schedule of due dates for reading assignments). Lectures and films will supplement reading materials, so you are required to attend every week for the entire class period. Attendance is mandatory and will count toward your grade in three ways: (1) exams will draw heavily on in-class material, (2) seven in-class assignments (dates not given) will be completed during class which cannot be made up and (3) attendance (assessed by the number of in-class assignments completed) will factor into the calculation of the ‘citizenship’ portion of your grade (see below). More specifically, 10 citizenship points will be deducted for each in-class assignment that is missed. To be clear, poor attendance **will** negatively affect your grade.

2.  Citizenship: You are citizens in a college community and each of you will be evaluated on the quality of your response to membership in this community. For our purposes, citizenship is a notion that refers to one’s degree of participation, professionalism and civility. It is expected that all students will show respect for the instructor and for the other students in class. That is, it is expected that students will avoid sleeping, reading, or disrupting class activities. Disruptive class activities include, but are not limited to, excessive or loud talking, ‘packing up’ one’s belongings minutes before the conclusion of class, or the use of a combative or adversarial tone. It is expected that all students will behave courteously when others ask questions or express ideas; and will arrive for class on time. Also, please turn off all cellular phones (or do not bring them at all) and note that there is no knitting (or other arts and crafts) allowed during class time. Citizenship will count for 5% of your final grade and will reflect the instructor’s overall judgment of a student’s conduct during the semester. Please be aware that although I encourage you to correspond with me via email, there are expectations for email etiquette that, if not met, can adversely influence your citizenship grade. Please see the letter from the Chair of Communication Sciences which discusses appropriate email discourse. The best way to think about these points is that they are points that you own at the beginning of the semester which can only be lost. Students who fail to meet the expectations for citizenship will be asked to leave class for the day which will put those students at additional risk for missing in-class assignments and course content. To ensure that you earn full points for citizenship, always maintain courtesy, use email etiquette when emailing the instructor, attend class regularly and participate thoughtfully during classroom discussions. Qualities of participation that are valued include active listening and discussion based on careful consideration of course materials.

3.  Thought papers: You will write several ‘thought papers’ over the course of the semester. Thought papers are short papers (maximum length = 2 pages double spaced with one-inch margins and 12 point font) that you will write based on your responses to specific questions that I pose to you (see pages 5-6 of syllabus for assigned topics for each thought paper). The purpose of thought papers is to get you to not only reflect upon course content but to demonstrate your critical evaluation of that content. Thought papers are **not merely** reproduction of course content (as you will see, I will often ask you to apply what you have learned to a novel problem). Also, thought papers are **not merely** opinion papers (although you are welcomed to espouse your opinion). Rather, thought papers are **informed opinion papers** to be evaluated according to the degree of reflection, critical thinking and mastery of course content they demonstrate. You are expected to reference relevant evidence from your text for each thought paper (you may also reference content from lecture when appropriate) however you are not expected to include a reference list (because I know the source. Please just include the author [Whitney] and the page number). You will see a total of nine thought papers but you are only required to write seven (chose any seven you want). You may write one additional paper for extra credit (a possible 25 points). Each thought paper (including the extra credit paper should you write it) is due on a particular day (see schedule for due dates). It is good practice to save all of your graded papers. If there are errors in grade recording, you may be asked to produce original paper to demonstrate the correct score. Late papers will be penalized five points for each day of lateness (not counting weekends). Please be aware that thought papers will not be accepted if they are sent electronically via email. They must be turned
in in-class or to the Instructor’s inbox in Pomeroy on the due date prior to 12:00 noon. The grading criteria for thought papers are as follows:

- **Grammar, spelling, and punctuation** 5 pts.
- **Organization and Clarity** (e.g., Does one sentence flow logically to the next? Is the paper organized to facilitate reader understanding?) 5 pts.
- **Appropriateness of argument/materials used/conclusions drawn** (e.g., Is the relevant evidence from text cited? Are the materials used appropriate? or Do the conclusions follow?) 8 pts.
- **Thoughtfulness, Comprehensiveness, Following directions** 7 pts.

4. **In-class Assignments:** Throughout the course you will be asked to complete in-class open-note exercises (a total of 7). These will sometimes be group exercises and at other times will be exercises that I will ask you to complete individually. For these in-class assignments, I usually ask you to reflect upon or apply what has been presented in lecture. In-class assignments will be graded according to a check-minus (15/25), check (20/25), and check-plus (25/25) system on the basis of their correctness, comprehensiveness, thoughtfulness or to the degree that they otherwise demonstrate your understanding of course content. When you are working in a group, the entire group will receive the same grade. These exercises will not be returned. If you would like to learn your grade on these exercises, please contact the GTF.

5. **Examinations:** Each exam will consist of approximately 40 multiple choice questions and two long answer questions. No make-up exams will be allowed without medical documentation. In addition, medical documentation must note that the student can not attend on the day of the exam and exams cannot be made up if study time is lost due to illness prior to the exam. This is just another reason why interrupted study (studying a little every day or every few days) is a preferred study strategy. If you have any questions or comments about the exam (or individual items) after you have carefully reviewed the exam keys, please put your questions or comments in writing (documenting information from your notes or text if appropriate). The GTF and the instructor will review and respond to your comments as quickly as possible. I will not answer questions regarding individual items on the exams in class. It is good practice to save all scantrons. If there are errors in grade recording, you may be asked to produce original scantrons to demonstrate the correct score.

**In-class Hour Exams:** There will be three closed-book exams that will cover reading, lecture and other in-class material (e.g., films). No notes will be allowed while taking these exams. The format of these exams will be multiple choice and long answer. Each of the three exams is worth 200 points (20% each or a combined total of 60% of your final grade).

**How to deal with this course:** You will do well in this course if you have good study strategies and disciplined study schedule. Many of you have only had limited experience with cognition and language so you may need to spend a great deal of time reading the texts and integrating the in-class material. This course will emphasize the mastery of concepts dealing with models and theories of language processing. Because the material in this course can be challenging and because the pace of this course is fast, this course requires a pattern of fairly intense but always consistent study to ensure success. Above all, keep up with the reading and lectures and do not get behind. In a related vein, please know that you are welcomed to come to me for any reason. I make a concerted effort to be available to every student.

**Suggestions for studying for exams:** First, you should spend 4-6 hours/week reading the text, reviewing notes, and studying. Second, read the assigned chapters before each class meeting. That will give you the opportunity to ask relevant questions and integrate information from the class with information from the text.
and films (I will ask about content covered in films!). Third, begin studying for each exam as early as possible. The material can be difficult and there is a lot of it, so cramming won’t work. Do not simply read and reread the text and notes; test yourself for your knowledge of the materials. Use the headlines in each chapter and ask yourself to list main points in each section. Make a list of the key terms in each chapter and try to come up with definitions and examples of each term. Then check yourself to make sure you’re correct. Use a similar process with your lecture notes.

FAQ: “Is this going to be on the test?” This is a frequently asked question that I will not answer because answering this question is not helpful to you and can even be detrimental. For instance, if I were to say “yes” there is a risk that students may focus on this material to the exclusion of other important content. On the other hand, if I were to say “no,” there is a risk that students will ignore the information which is central to learning other related and important topics. Moreover, the question assumes that outcome (i.e., letter grade) is more important than process (i.e., your learning). For these reason, I welcome all questions except this one.

STUDENTS WITH DISABILITIES: It is the responsibility of all students seeking disability accommodations to self-identify by contacting the appropriate Certifying Office and supplying adequate and comprehensive documentation of the disability. Students are encouraged to self-identify as early as possible. Accommodations cannot be made retroactively.

DISCLOSURE OF GRADES: This course follows the guidelines of the Family Educational Rights and Privacy Act (FERPA). All materials need to be picked up by the individual student unless written permission has been provided.

RELIGIOUS HOLIDAYS: Students have the right to practice the religion of their choice. Each semester students should submit in writing to their instructors by the end of the second full week of classes their documented religious holiday schedule for the semester. Students who miss work for the purpose of religious observance will be granted credit for any missed in-class assignments.

STUDENTS INVOLVED IN UVM ATHLETICS: Students who are athletes on UVM teams (go cats go!) must submit in writing to their instructors by the end of the second full week of classes their events schedule for the semester. Students who miss class for the purpose of athletic activities will be granted credit for any missed in-class assignments.

POLICY ON ACADEMIC HONESTY: Academic dishonesty or an offense against academic honesty includes acts that may subvert or compromise the integrity of the educational process at The University of Vermont. Such acts are serious offenses, which insult the integrity of the entire academic community of the University. Offenses against academic honesty are any acts which would have the effect of unfairly promoting or enhancing one’s academic standing within the entire community of learners which includes, but is not limited to, the faculty and students of The University of Vermont. Academic dishonesty also includes knowingly permitting or assisting any person in the commission of an offense or academic dishonesty. The following is a list of some, but not all, offenses of academic honesty accommodated by the above definition:

1. Plagiarism – “offering as one’s own work the words of another”
2. Acquiring material from another person or organization and submitting it as your own without attributing it to the originator of the work.
3. Communicating during exams or collaborating in the preparation of assignments without the instructor’s permission.
4. Using crib sheets, notes, etc. during an examination except when permitted by the instructor.
5. Soliciting or providing to another copies or portions of exams prior to the administration of the exam without the instructor’s authorization.
6. Representing oneself as another during an exam or assignment.
7. Changing an exam or assignment to mislead another.
8. Forging academic records.
9. Presenting false information at an academic proceeding or intentionally destroying evidence.
10. Delaying return of or destroying library materials that infringes on equal access to all students of academic resources.
11. Preventing others access to the UVM computer system and/or destroying or copying files without consent.
12. Presenting the same material for more than one course without the permission of the instructor.

EMAIL ETIQUETTE: LETTER FROM THE CHAIR

Dear Undergraduate & Graduate Students,

I am writing to talk with you about the use of e-mail and how you might facilitate more effective and efficient communication with faculty. With the accessibility of technology, students and faculty have numerous opportunities for quick and efficient communication. When sending e-mails, it is important that you consider your audience and the context. E-mail should follow a protocol that is respectful in tone and presentation and sensitive to faculty time and availability.

I had an opportunity to review some materials on e-mail etiquette and found very useful pointers for students and faculty as we communicate via e-mail. I encourage you to look at the e-mail etiquette attachment I have included. Some of the ideas have been taken from Rutgers (www.rutgers.edu), Purdue (www.purdue.edu) and Yale (www.yale.edu) University—these organizations have created some excellent suggestions on the use of e-mail for students, faculty and staff. There are also other tools and resources I included for the use of e-mail that could be helpful to you not only while you are at UVM but in your future job experiences.

Faculty members want to be responsive to your questions and needs. There are strategies you can use that will facilitate this process:

1. Use appropriate salutations
2. Indicate the purpose of your e-mail in the subject line
3. E-mails should be short and their purpose should be clear
4. Be careful of spelling errors and agrammatical sentences
5. Use respectful language, and avoid slang and text messaging abbreviations

Faculty members also want to respond to your e-mail in a timely fashion. Reasonable expectations for responding, however, must be considered. Here are some thoughts that should guide your planning about sending e-mail and receiving responses:

1. It is important to remember that faculty members are not always at their desk as they are teaching and engaged in service and research activities. They will respond as soon as they are able.
2. Faculty members are not expected to respond to e-mail on weekends, although many of them may choose to do so. A good guideline for you is that faculty typically will not be responding to e-mail from 5:00 pm on Friday evening until 8:00 am on Monday morning, unless you have made special arrangements with the faculty member.
3. Faculty members are also not expected to respond to e-mails during the week after 5:00 pm. Again, many of them will, if they are able, but it is important to understand that their availability after 5:00 pm may be limited.

6
I want to encourage you to continue to communicate with the CMSI faculty to ensure your learning experience in the Department of Communication Sciences is both productive and meaningful. Faculty members appreciate opportunities to talk with students face-to-face, by phone and through e-mail. In each of these venues, it is important to communicate in a professional and respectful manner. You can expect the same professional and respectful communication from your faculty.

Sincerely,
Patricia A. Prelock, Ph.D., CCC-SLP, Professor & Chair
Department of Communication Sciences
University of Vermont

ASSIGNED TOPICS FOR THOUGHT PAPERS:

Thought paper # 1: Find a magazine article (or you may use the internet) about an animal communication system that was *not* discussed in Chapter 1 (for example, numerous accounts have been written about communication among dolphins). Briefly describe the nature of the animal communication system and then analyze the communication system in terms of Hockett’s features of language. Describe each feature and discuss which are present and which are absent being sure to justify your answers. Be sure to attach the article (or a print out of the internet article) to your thought paper.

Thought paper # 2: Draw a phrase structure tree for the sentence ‘Bill crossed the line.’ Now draw a diagram that would show how Skinner conceptualized the production of the same sentence. Chomsky’s structure tree can account for recursion whereas Skinner’s model can not, however both can account for iteration. What is recursion and what is iteration? (define and give an example of each). How does Chomsky’s structure tree account for recursion? Why can Skinner’s model account for iteration but not recursion? Make sure that your paper makes reference to and clearly describes transformational rules and long-distance dependencies.

Thought paper # 3: As Chapter 3 discusses, through recursion we can continue embedding more and more clauses inside a sentence. So, *Wanda went to the store* can be expanded to *Wanda, the woman who lives next door, went to the store*. Embed a few more clauses in the latter sentence (that is, add clauses through recursion, *not iteration*). At what point does the sentence become nearly impossible to understand? Think about why this comprehension problem happens, given Baddeley’s model of working memory. Start with the assumption that we must hold a sentence in working memory while language comprehension processes work on the sentence.

Thought paper # 4: Try scanning some newspaper or magazine articles (or the internet) for examples of the linguistic intergroup bias (LIB) discussed in Chapter 4. One good place to find such examples is in articles that report comments of two feuding governments on some issue. You can take a current event or dig back into the past (e.g., the Tiananmen Square incident in China in 1989 when the Chinese government stopped pro-democracy rallies). What is the LIB? Describe how the two parties differ in their description of events. Be careful in how you select an article for this thought paper. Not all will lend themselves to this assignment. You will need to chose one that gives lots of examples of how the two disagreeing parties use language. What are the implications of the LIB for the relationship between language and thought? Attach the article to your thought paper.

Thought paper # 5: Try out the following classic puzzle on a few people: *A boy goes out with his father to see a movie. At an intersection near the hospital, another driver runs a stop sign, crashing into the*
passenger side of the car, where the boy is seated. The father scoops up the boy, who is seriously injured, and runs into the hospital. A surgeon is summoned who, upon seeing the boy, declares “I can’t operate on this boy. He’s my son!” How can this be?

Many people have trouble with this puzzle because they assume that the surgeon is a man. Now try out the puzzle on a few other people, substituting mother in place of father. Now it doesn’t seem a puzzle at all. Consider the bias that makes this problem difficult: Does it reflect the influence of language on thought, or is it an effect of thoughts, in the form of prior beliefs, on language interpretation? (or might both be true?). Be sure to reference your text (Ch. 4 specifically) when appropriate and defend your position.

Thought paper # 6: As Chapter 5 discusses, both the motor theory and the FLMP maintain that visual information can play a role in speech perception. What are the implications of each of these theories for lip reading? Would either view predict that lip reading can be a relatively accurate way to perceive language? How would a person’s level of language experience affect the accuracy of his or her lip reading?

Thought paper # 7: In the figure below, two dimensions are shown. One depicts an autonomous versus interactive continuum. As your text discusses, autonomous word recognition models assume that context cannot affect the early stages of word recognition, whereas interactive models assume that context can affect all aspects of word recognition. Of course, models vary in terms of how much interaction they permit. Likewise, there is a dimension representing the question of whether word recognition is explained as a search process or as an activation process. Indicate where the cohort model, the TRACE model, and each of the three models discussed in Chapter 6 would fall along these dimensions. If you need a hint to get started, put Forster’s autonomous search model in the upper-right quadrant. Justify your choices referencing your text when appropriate.

Thought paper # 8: Osgood (1971) came up with perhaps the best example of the problem of ambiguity in sentence processing:

“Light lights lightly light light lights”

This is a grammatical sentence with a sensible meaning. See if you can come up with a more natural sounding paraphrase (i.e., what does this sentence mean?). As you try to find a paraphrase, how are you making use of lexical information? And in what way is syntactic information involved in your understanding of this sentence? For example, how do you know whether to treat a particular word in the sentence as a noun, verb, adjective, or adverb? Does world knowledge or partial comprehension of the sentence come into play while you are paraphrasing particular words? Consider the relevant content of Chapter 7 when formulating your response.*Osgood’s paraphrase can be found at the bottom of the next page, but give this exercise a try before you read it because if you don’t, it will complicate your efforts to thoughtfully answer this question.
Conceptual metaphors are an important part of the language of scientific explanation. In chemistry classes, for example, instructors often use a model of the solar system to introduce students to the idea of atomic structure. In other words, particles orbiting the nucleus are compared to planets going around the sun. Some instructors argue, however, that this model leads to an incorrect conception, so they may speak instead of a ‘cloud’ surrounding the nucleus of an atom. The point is that conceptual metaphors can clarify or obscure depending on how they are interpreted. Identify as many conceptual metaphors as you can that are being used in the study of cognition and language (hint: think back on the content from the entire course thus far…I can think of at least five). Then specifically identify which metaphor network (i.e., connectionist) models are based on and which metaphor serial/modular models are based on. What are the strengths and weaknesses of each of these metaphors for conceptualizing human information processing? You will need to reference your text and for this exercise, I suggest that you also reference your lecture notes.

* pale flames gently illuminate airy lanterns