PSYD65S - PATHOLOGIES OF THE NERVOUS SYSTEM

Class meets Tuesday's from 11-1 in R4226.

Instructor:

Prof. Gwen O. Ivy

Office:

S-569

Phone:

287-7438

Office Hours:

Tuesday 1-2

Wednesday 2-3

Thursday 5-6

(or by appointment)

Text:

Neurobiology of Disease

Edited by Alan Pearlman and Robert Collins

GRADING:

MIDTERM EXAM (25%): essay, short answer, fill in blanks; covers all material covered before reading week.

TERM PAPER (25%): 15-20 pages, on topic of your choice, to be approved by instructor.

GENERAL CLASS PARTICIPATION (5%): includes attendance and discussions.

ORAL PRESENTATION (10%): includes choice of assigned paper for class with questions and discussion.

FINAL EXAM (35%): essay, short answer, fill in the blanks; <u>cumulative</u> (mainly because there is background material before reading week which contributes to your understanding of material covered after reading week), to be held during final exam period.

DESCRIPTION OF COURSE:

Pathologies of the nervous system is an upper level seminar course. The material covered will consist of the entire textbook "Neurobiology of Disease", as well as current scientific journal articles relating to the topics to be covered. During the first part of the course, before reading week, the instructor will present an overview of the readings, highlighting and explaining the facts and concepts deemed most important. Each week the students will be given specific questions to be discussed by all at the following week's class. After reading week, the instructor will present an overview and update of the topic to be discussed that week. This will be followed by *oral presentations* by 2 or 3 students in the class.

Specifics of Oral Presentations:

1. Each student will choose a topic either from the syllabus or from personal interest in a given pathology. This choice will be submitted to the instructor (for approval) in writing during the second class session. Please make 3 or 4 choices in order of preference.

- 2. When you give your talk, your choice of paper should relate to a specific aspect of a disease state. For example, you may <u>not</u> choose "Parkinson's disease" in general, but may choose "the possible role of free radicals in the pathogenesis of Parkinson's disease" or "current and future treatment startegies for Parkinson's disease".
- 3. When your topic is approved, you should go to the library and find a current review article (1995-1997) or experimental journal article(s) pertaining to your topic. These must be approved by the instructor at least 2 weeks prior to your class presentation. At that time, one copy of the article(s) will be given to the instructor and another put on reserve in the library.
- 4. At the time of your oral presentation, you will give a brief (approx. 10 minutes) overview of your topic. You will then present 2 questions on the topic to the class and will lead a discussion on the answers to these questions for 10 minutes.
- 5. At the end of your 20 minutes, you should present your questions and answers to them to the class in writing (please present them to me before your talk).
- 6. All of the above is defined as "oral presentation" and is worth 10% of the total grade.

PSY D65S 1997

Dr. G.O. Ivy

REMINDERS

- 1. Your term paper is officially due on April, 11th. However, no penalty will be given until after April 14th. At that time, your paper will lose 2 points per day.
- 2. In your papers, all references must be <u>complete</u> with authors, titles, journals or books, volumes, pages, etc., so that I may look up the reference if I desire.
- 3. References should <u>not be numbered</u>, either in the text or in the <u>Reference List</u> (not called a Bibliography in a scientific paper, in general).
- 4. Your paper should be written as a professional review article. Your audience is <u>me</u>, i.e. feel free to be as sophisticated in your presentation as you feel comfortable with. Have someone proofread it. You will lose points for typos, spelling and grammatical errors. At this point in your careers, you will be graded on professional presentation as well as on content.
- 5. You will receive up to 3 additional points on your grade for the term paper for handing in your xeroxed references. These must have the source (i.e. journal, vol. pgs., year, etc. -- or book -- etc.) fully demarcated on the paper and must also be complete with the references at the end of it. Otherwise, you will not get as much credit for your copy. Note: This is my way of helping to keep my reference library up to date and, if you've bothered to xerox an article, you may as well receive credit for it. Any marks you make on the article are fine -- no problem.

| Date: | <u>Description:</u> |
|-----------|--|
| Jan 7 | Introduction to course; Normal aging vs. disease, definitions and philosophical discussion; age-related diseases, genetic, sporadic. |
| Jan 14 | Axons, nerves, muscles, neuromuscular junction Chapters 1-4 of text; pages 3-84. |
| Jan 21 | Somatosensory, auditory, visual, vestibular systems and pain Chapters 5-8 of text; pages 86-167 |
| Jan 28 | Motor system, hypothalamus, neocortex, learning and memory Chapters 8-12 of text; pages 168-242 |
| Feb 4 | Motor system, hypothalamus, etc. (continued) (Finish chapters 8-12) |
| Feb 11 | Alzheimer's Disease and Dementia (lecture and discussion) Chapter 15; assigned readings |
| Feb 18 | READING WEEK |
| Feb 24-28 | MIDTERM EXAM - 5-7pm; day and time TBA |
| Feb 25 | Parkinson's Disease Chapter 23; assigned readings; presentations and discussion |
| Mar 4 | Huntington's Disease Chapter 13; assigned readings; presentations and discussion |
| Mar 11 | Metabolic Encephalopathies and NCL Diseases Chapter 18; assigned readings; presentations and discussion |
| Mar 18 | Seizures and Epilepsy Chapter 14; assigned readings; presentations and discussion |

| Mar 25 | Stroke, CSF, Blood-Brain Barrier and Edema |
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| | Chapters 17&19; assigned readings; presentations and discussion |
| Apr 1 | Tumors and Infections (Bacterial, Fungal, Parasitic; eg., Malaria) Chapters 20&21; assigned readings; presentations and discussion |
| Apr 8 | Viral Infections (eg., HIV) and Prion Diseases (eg., BSE) Chapter 22; assigned readings; presentations and discussion |
| Apr 11 | Last day of classes; term paper due by 5pm |
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