APPENDIX.
Supplementary Information to selected Proposals
CLAS Committee on Curricula and Courses
October 28, 2003

2003-139 PSYC 2xxW. Health Psychology.

Course Syllabus
Spring, 2005
Instructor: Crystal L. Park, Ph.D.
Office: 168 Bousfield
Contact information: 860.486.3520 (o), 860.536.6602 (h), crysdara@aol.com (email)

The Course
The main purposes of this course are to examine how the areas of health, illness and medicine can be studied from a psychological prospective, to introduce you to the main topics and issues in the area of health psychology and to train you to judge the scientific quality of research on psychology and medicine. Whereas the short length of the course prevents me from spending as much time on a topic as I would like, I am open to spending more time on a topic based on suggestions from the class. In general I am more interested in your thinking about and understanding the information than in the strict memorization of facts. Tests will reflect this philosophy. Note that this is a Writing skills course (a "W"), meaning that you will be expected to do a substantial amount of writing in this class (details below)

The Text
The text required for this course is one of the most thorough treatments of the subject available - Health Psychology (Shelley E. Taylor). Class will be devoted more to introducing and summarizing topics fully dealt with in the text and clarifying difficult areas, rather than repeating the material in the chapters. More importantly, I will bring in current topics from the field and give you as much hands on experience with the subject matter as possible. You are responsible for all the material in the assigned readings even if not covered in lectures. I urge you to bring up any problems you have with the readings during class. Please feel free to ask questions and offer constructive comments during or after lectures.

Grading and Requirements
There will be three exams, and a number of group activities and papers:

I. Exams will be a combination of multiple choice and short answers. Study guides and sample questions will be handed out a week prior to each exam.

II. Unannounced group activities will cover material for both that day and the previous class. Please read the material for the day before coming to class. In addition, for each reading assignment, try to write down any questions you have about it as you read it. I may ask you to read out comments or questions that you had on the readings in class so I can get a sense of what you are getting from it.

III. For the Paper, you will be required to choose topic related to the course according to guidelines I will provide in class. The topic chosen should be registered and approved by me by February 5, and outlines will be due on February 28. The first draft of the paper will be due on March 27th. Final drafts will be due on the last day of class. Papers should be at least 15 double-spaced pages and not exceed 20 double spaced pages (should be spell-checked, grammatically sound, in a 10-12 point font, and have 1 inch margins). Complete and specific details regarding each assignment will be covered in class and separate handouts. You will receive from me a detailed critique of your outline and the draft of your paper. Based on this feedback, your final paper should be a well-written and polished paper. Please note: Because this is a W course, if you do not get a passing grade on the paper (that is, higher than 60%), you will also fail the course.

Grades will be assigned in the following manner:
Exam 1 - 13%
Exam 2 - 13%
Exam 3 - 13%
Group Activities 11%
Paper 50%

A > = 93 C > = 68
A/B > = 88 D > = 63
B > = 83 F <<< 60 [unthinkable]
B/C > = 78

NO make-up exams will be given. Because exam dates are specified in well in advance and scheduled during class times you will be expected to be able to take all of them. Exceptions for catastrophic cases will be reviewed individually.

Approximate Schedule of Classes
Class Meeting Topic Reading (Ch.
1 Jan. 16 What is health psychology all about? Ch. 1
2 Jan. 18 Biology Ch. 2
3 Jan. 23 Stress Ch. 6
4 Jan. 25 Stress Ch. 6
5 Jan. 30 Stress
6 Feb. 1 Stress and immunity Ch. 6
7 Feb. 6 Coping Ch. 7
8 Feb. 8 Coping Styles Ch. 7
9 Feb. 13 EXAM ONE
10 Feb. 15 Health psychology research
11 Feb. 20 Models of Change Ch. 3
12 Feb. 20 Models of Change-Empirical evidence Ch. 3
13 Feb. 27 Models of Change- Ongoing research example Ch. 3
14 Mar. 1 Interventions Ch. 3
15 Mar. 6 Smoking Ch. 4
16 Mar. 8 Smoking Ch. 4

SPRING BREAK MARCH 10TH - MARCH 18TH
17 Mar. 20 Exercise Ch. 5
18 Mar. 22 Eating Ch. 5
19 Mar. 27 Eating
20 Mar. 29 EXAM TWO
21 Apr. 3 Pain Ch. 10
22 Apr. 5 Pain Ch. 10
23 Apr. 10 Chronic Illnesses Ch. 11
24 Apr. 12 Chronic Illnesses Ch. 11
25 Apr. 17 Terminal Illnesses Ch. 12
26 Apr. 19 Terminal Illnesses Ch. 12
27 Apr. 24 Heart Disease---Cancer Ch. 13
28 Apr. 26 Gender and Health
29 May 1 Culture and Health
30 May 3 Review
15 May EXAM THREE - 1.00 p.m. to 3.00 p.m.

2003-140 Revised Audit sheet for Minor in Biomedical Engineering

Minor in Biomedical Engineering
Plan of Study
School of Engineering

Minor Requirements • Audit Check List 2003-2004

Course Requirements
Five courses are necessary to fulfill requirements of the Biomedical engineering minor. All students must take the following three required courses:

1. Organic Chemistry (Chem 243, 3 credits)
2. Human Physiology & Anatomy I (PNB 264, 4 credits)
3. Introduction to Biomedical Engineering (BME 210, 3 credits) or BME 211.

All students must take one of the following engineering courses:

- Introduction to Biochemical Engineering (BME 221, 3 credits)
- Biosystem Analysis (BME 251, 3 credits)
- Biomedical Engineering Measurements (BME 252, 4 credits)
- Biomechanics (BME 262W, 4 credits)
- Biomaterials (BME 271, 4 credits)

All students must take one of the following life science courses:

- Introduction to Biochemistry (MCB 203, 4 credits)
- Biochemistry (MCB 204, 5 credits)

- Fundamental of Microbiology (MCB 229, 4 credits)
- Microcomputer Applications in Molecular & Cell Biology (MCB 232C, 3 credits)
- Human Physiology & Anatomy II (PNB 265, 4 credits)

Instructions to Students: When you are preparing your final plan of study, you must obtain approval from both the Head of your Department (Chemical Engineering, Civil & Environmental Engineering, Computer Science & Engineering, Electrical & Systems Engineering, Mechanical Engineering, or Metallurgy & Materials Engineering) and the Biomedical Engineering Program Director. Submit the original of this form with your final plan of study to the Registrar, give one copy to your advisor, and keep one copy for your records.

Name of Student: ______________________________

Student's Social Security Number: ______________________________

I approve the above program for the Minor in Biomedical Engineering

.

____________________________________ Head

.

____________________________________ Biomedical Engineering Program Director

----

2003-141 Revised Audit sheet for Minor in Criminal Justice

Criminal Justice Minor
Plan Of Study

Name: _______________________________________ Logon Id #: __________________
Major _____________________________ Grad Date: _______
Local Address:
____
_______ Local Phone: ______________________
Home Address:
____
________ Home Phone: ______________________

Course Requirements

A Total Of 18 Credits As Follows: A Maximum Of Three Credits In The Minor Can Be Part Of A Major, And 12 To 15 Credits Can Constitute Related Area Courses. A Minimum Of C Must Be Earned In Each Course. Complete With The Semester And Year The Course Is Taken. (I.E. Sp 99)

I. Three Required Courses (Nine Credits):

______Pols 255 Politics Of Crime And Justice
______Soci 216 Criminology
______Psyc 245 Abnormal Psychology

Ii. One Course From The Following:
______Hdfs 288 Supervised Field Work*
______Intd 210 Urban Field Studies*
______Pols 297 Supervised Field Work *
______Soci 296 Field Experience*
______Soci 340 Seminar In Criminal Justice (For Seniors With At Least A 2.6 TGPA.)
______Psyc 294 Field Experience*

Field Work Agency :________________________________

Job Title :________________________________

Supervisor's Name :________________________________

Telephone Number :________________________________
* Field Work Must Be In A Criminal Justice Setting

Iii. Two Courses (Six Credits) From The Following

______Hdfs 201 Diversity Issues In Human Development And Family Relations
______Hdfs 264 Legal Aspects Of Family Life
______Hdfs 266 Introduction To Counseling
______Hdfs 276 Planning And Managing Human Service Programs
______Hdfs 284 Adolescence: Youth & Society
______Phil 226 Philosophy Of Law
______Pols 252 Constitutional Interpretation
______Pols 251 Law And The Political Community/Law And Society
______Pols 260 Public Administration
______Pols 274 State And Local Government
______Pols 299 Independent Study (On A Criminal Justice Topic)
______Psyc 202q Research In Psychology
______Psyc 240 Social Psychology
______Psyc 243 The Study Of Personality
______Psyc 256 Cognition And Problem Solving
______Soci 217 Deviant Behavior
______Soci 218 Juvenile Delinquency
______Soci 219 Drugs And Society
______Soci 243 Prejudice & Discrimination
______Soci 244 Sociology Of Mental Illness
______Soci 285 Social Welfare & Social Work

_____Soci 299 Independent Study (On A Criminal Justice Topic)
_____Soci 340 Seminar In Criminal Justice (For Seniors With At Least A 2.6 TGPA.)
_____Ws 263 Women And Violence

Minor Advisor____________________________ Dept._______
Signature____________________________ U-Box______ Phone_____________________

Minor Advisors: Richard Cole, Political Science; Brad Wright, Sociology; Brett Steinberg And Diane Quinn, Psychology; And Steve Wisensale, Human Development And Family Relations

*Advisors Recommend Additional Preparation In Writing Skills, Computer Skills, And Foreign Language Skills (Especially Spanish) For Students Interested In Careers In Criminal Justice.

The signed minor plan of study and a copy of your signed major plan of study must be filed with Beth Frankel-Merenstein, Room 340, SFS Building, U-2171 by the first four weeks of your last semester.

Beth Frankel-Merenstein_______________________________ U-BOX 2171

2003-142 PHYSICS 298. Computational Physics.

Proposed Syllabus: (based on the books by A. L. Garcia, Numerical Methods for Physics, Prentice Hall, 1994, and M. L. Boas, Mathematical Methods in the Physical Sciences, John Wiley and Sons, 1966.)

Week 1: Computer numbers, their nature and their errors; use of MATLAB

Week 2: Numerical differentiation and integration; use of MATLAB

Week 3: Complex numbers; Boas, Chapter 2

Week 4: Vector analysis, divergence, divergence theorem, curl, Stoke's theorem; Boas, Chapter 5

Week 5: Fourier series; Boas, Chapter 6

Week 6: Legendre polynomials, Bessel functions, orthogonal polynomials; part I; Boas, Chapter 12

Week 7: Legendre polynomials, Bessel functions, orthogonal polynomials, part II; Boas, Chapter 12

Week 8: Ordinary differential equations, matrices, eigenvalues, applications to Projectile motion with air friction and a pendulum with large amplitude, part I; Garcia, Chapter 3

Week 9: Ordinary differential equations, matrices, eigenvalues, applications to projectile motion with air friction and a pendulum with large amplitude, part II; Garcia, Chapter 3

Week 10: Systems of equations, matrices, eigenvalues, part I, application to coupled oscillators; Garcia, Chapter 4

Week 11: Systems of equations, matrices, eigenvalues, part II, application to coupled oscillators; Garcia, Chapter 4

Week 12: Physics applications, part I, heat conduction, waves on a string, electrostatic potentials for various charge distributions

Week 13: Physics applications, part II, heat conduction waves on a string, electrostatic potentials for various charge distributions

Week 14: Finish up, review

2003-143

Appendix: Revised Syllabus for Physics 155, Introductory Astronomy:

Week l
Lecture l
Introduction and overview of course. Perspectives on historical astronomy. Use of Star and Planet Finder. Horizon coordinate system of altitude and azimuth; dis- advantages (both time and observer dependent).

Lecture 2 The equatorial coordinate system of Right Ascension and Declination. How to set the celestial sphere in lab: altitude of NCP=observer's latitude and a) put a known star on meridian, then use earth rotation rate of 15 degrees per hour. Consequences of Alt NCP = Lat, i.e. what you observe at north pole, at equator, and at Storrs, CT. Circumpolar stars and those that rise and set as a function of latitude

Lecture 3 Setting the star globe b) using the Sun at noon plus earth's rotation, and c) using Sidereal Time. Definition of Sidereal Time, with sample problems worked out. The 4 "cardinal points" in sun's apparent path: spring and fall equinoxes, summer and winter solstices. The ecliptic and origin of the seasons. Basics of celestial navigation

Week 2
Lecture 1 Solar Time vs Sidereal Time. Brief overview of constellations and origins of their names. Designations of stars: proper names, Greek alphabet, numbers. Definition of apparent stellar magnitude and magnitude differences in terms of ratios of absolute luminosity. Some worked examples.

Lecture 2 Uses of the Big Dipper as a compass, clock and calendar. Blocking out the sky with two major legends and their associated constellations: the Andromeda Group and the Orion

Legend. The Zodiac and its first magnitude stars. Examples of various magnitudes seen: the moon, planets, binocular, photographic and CCD limits; generalizing to decimal and negative magnitudes.

Lecture 3 Shape and size of Earth' Erathosthanes' measurement. Proofs of Earth's roundness. Major motions of Earth and proof thereof: rotation, revolution, precession, nutation. Consequences of precession, slow shift of celestial coordinates. Smaller motions of Earth: variation of latitude, motion around barycenter of earth-moon, solar motion towards Hercules, galaxy rotation and translation.

Week 3

Lecture 1 Details of Earth's elliptical orbit: perihelion, aphelion, eccentricity. Orbits of planets as seen the planetarium show: inferior and superior conjunction, opposition, greatest elongation, appearances in the sky. Brief discussion of the calendar and its history of successive compromises between earth rotation, revolution and lunar revolution time periods. Tropical Year vs Sidereal Year; the ~Us unit of time.

Lecture 2 Julian Calendar and refinements; Gregorian calendar. The sky as a clock; nonuniform apparent solar motion and the mean sun. The Equation of Time. Standard Time Zones, daylight savings time, universal time. Reading a sundial and correction to Eastern Standard Time and universal time. Types of sundials; a sundial for Mars.

Lecture 3 Properties of light. General characteristics of all EM Waves: their velocity in vacuum, inverse square law, law of reflection and refraction, index of refraction, dispersion. Lenses: aperture, focal length and its determination.

Week 4

Lecture 1 Hour Exam 1.

Lecture 2. Telescopes: light-gathering power, magnifying power. Galilean refracting telescopes, image inversion, exit pupil. Disadvantage of refracting telescopes. Newtonian reflectors and other designs.

Lecture 3 Telescopic aberrations. Schmidt corrected telescopes. Power considerations. Diffraction and resolving power of a telescope. Atmospheric concerns, seeing. Radio telescopes and their limitations, advantages. Aids to improve radio resolution.

Week 5

Lecture 1 The moon, distance via triangulation and orbit characteristics. Lunar phases and appearance vs elongation. Rising, transiting and setting of the various lunar phases. Some worked problems (if you seen the moon rising at 3am, what's it phase?). Lunar motions: sidereal vs synodic month (revolution), rotation, libration in longitude and latitude.

Lecture 2 Thumbnail review of Apollo results: what did we learn about the moon? Theories of lunar origin: which one is acceptable today? Eclipses: geometry of solar vs lunar eclipses

Lecture 3 What you'll see at a lunar and solar eclipse. Factors determining whether an eclipse will occur and your chances of seeing it: duration, relative frequency of occurrence, visibility, alignment of phase (nodes). A bit of eclipse history in literature. The Saros cycle.

Week 6
Lecture 1 Overview of Solar System, comparative planetology. Some generalizations for all planets. Tycho's Orrery for today's date, 10am EST and interpretation. Characteristics of inner (terrestrial) vs outer (Jovian) planets: distances, masses, densities, sidereal/synodic periods. Retrograde motion.

Lecture 2 Phases of the planets: inferior and superior conjunction, opposition for inferior vs superior planets. Several models: geo-and helio-centric (Ptolemaic vs Copernican) and Tycho Brahe's Model. How observation of planetary phases destroyed the geocentric model. Bode's Law.

Lecture 3 A thumbnail history of astronomy from Aristarchus, to Ptolemy, Copernicus, Brahe, Kepler and his 3 laws of planetary motion. Contributions of Galileo.

Week 7
Lecture 1 Hour Exam II

Lecture 2 Isaac Newton and his 3 laws of motion. Adding the Law of Universal Gravitation and deriving Kepler's third law. Consequences: objects fall independent of their weight, determining the mass of a planet from g(planet), the Harmonic Law.

Lecture 3 Comparative planetology: earth as a standard with plate tectonics, atmosphere, magnetic field, rapid rotation. Developmental stages for terrestrial planets.

Week 8
Lecture 1 Terrestrial planets: Moon, Mercury, Venus, Earth and Mars. Similarities and differences. Possibilities for life among these.

Lecture 2 Jovian planets: Jupiter, Saturn, Neptune and Uranus. Similarities and differences. Rings and Moons; Roche limit. Resonances.

Lecture 3 Pluto and other icy bodies, asteroids and comets. The Oort Cloud. Extra- solar planets, how they're detected and characteristics.

Week 9
Lecture 1 The sun: components, mass, properties, sunspots. Source of solar (and stellar) energy, the solar constant, proton-proton cycle, carbon cycle. Solar spectrum. Sunspot cycle.

Lecture 2 Stars: measuring distances, trigonometric parallax. Definition of a Parsec, R(pc) = 1/_(sec), and the light year. Examples of measured parallax. Proper motion; stars with large proper motion have large parallax, enabling astronomers to select nearby stars to measure.

Lecture 3 Space velocity of stars, radial and tangential components and how they are determined. Sun's motion, Apex of the sun's way (direction of convergence of stellar proper motions).

Week 10
Lecture 1 Stellar magnitudes, Fechner's Law, visual and photographic magnitudes. Color index. Distance modulus equation, absolute magnitudes.

Lecture 2 Comparing sun in absolute magnitude with 8 nearest stars, and with 8 brightest stars: refining our place in the universe. Binary stars: visual, astrometric, spectroscopic, spectrum and eclipsing: relative numbers. Use of binaries to get stellar masses; Mass- Luminosity Law.

Lecture 3 Determining distances via dynamic parallax. Methods of deter- mining stellar radii, including eclipsing binaries. Characteristics of light curves of eclipsing binaries.

Week 11
Lecture 1 Characteristics of star light: total light (Stefan-Boltzman Law), and wavelength distribution of light (Planck Law). Wien's Law. Classifying stellar spectra: OBAFGKMRNS, with temperature as the critical variable.

Lecture 2 The HR diagram, including mass and radius. Dwarf and giant stars on the HR diagram. The Luminosity Function. The 100 brightest stars and the 100 nearest stars on the HR diagram.

Lecture 3 Stellar Evolution: Pre-Main Sequence stages, proof of star birth. Life expectance of stars of various masses. Evolutionary stages as a function of stellar mass. Fates of low and high mass stars. How stars shed mass.

Week 12
Lecture 1 Stellar corpses: white dwarfs, neutron stars and black holes, their characteristic sizes, masses and properties. Observations and further evolution.

Lecture 2 Variable stars: as a stage of stellar evolution. Intrinsic vs extrinsic variables. Periodic variables: Cepheids, RR Lyrae, TTauri, Mira type. The Period-Luminosity Law and distance determination. Aperiodic variable stars: novae, supernovae of Type I and II.

Lecture 3 Hour Exam III

Week 13
Lecture 1 Star Clusters: Open vs Globular. Differences in distribution, size, mass, geometry, age, HR diagrams, what they tell us about our galaxy.

Lecture 2 The Milky Way Galaxy: structure, magnetic field, rotation, dark matter from rotation curve, stellar populations, black hole at center.

Lecture 3 Normal Galaxies: Hubble's classification, masses, formation and evolution, Hubble's Law and distance determination.

Week 14
Lecture 1 Active galaxies, radio galaxies, galactic collisions. Quasars. Their various structures, properties, energy output. Gravita- tional lensing.

Lecture 2 Cosmology: The Big Bang and first three minutes. The expanding universe, inflation, the most distant objects. Fate of the universe and how we know this. Dark energy and acceleration of the universe.

Lecture 3 Life in the universe: origins of life, prospects for finding life else- where, the search for extraterrestrial intelligence. Are we alone?

End of Appendix for Oct. 28, 2003.