

The Pennsylvania State University
Department of Biobehavioral Health
Biobehavioral Aspects of Stress (BBH 432)
Spring 2005 Course Syllabus

Course Time/Location: MWF 1:25-2:15pm in room 104 Thomas Bldg.

Instructor

Dr. Sheila G. West

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**Note: I will send messages to your PSU email address,
so you should check it often or forward your messages!!!**

Graduate Teaching Assistant

Name: Spring Cooper

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Office Hours: To be announced

Phone: 863-4727

Office: Room 304 HHD East

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See This TA for: Help with class materials,

Questions about grades for homework and tests

Teaching Assistant #2

Kimberly Kriegbaum

Email: klk264@psu.edu

Teaching Assistant #3

Claire Kang

Email: sck154@psu.edu

**The undergrad teaching assistants were the best students from last semester!
They can help you with confusing info and will help lead the exam reviews.**

Email policy: My expectation is that you will use the free email account provided by PSU and I will send mail to the address listed in the registrar's database. Whenever possible I will respond to your email within 48 hours. Please note that I often send attachments. If you have your mail forwarded to AOL or any account that won't accept attachments keep in mind that you may have to contact a TA to get an assignment. If you have questions about your grades or grade changes, or if you need another copy of the exam review or any assignment, please contact Spring Cooper. I think email is very useful for resolving questions from the class and if you find an error in an assignment or the syllabus, please contact me. I don't need emails from you telling me that you will miss class, however, unless you are missing an important assignment or more than a week of classes.

Course Objectives

The goal of this course is to review the scientific literature on the effects of stress on physical and, to a lesser extent, psychological health. **The focus is on physiological mechanisms through which various psychological stressors damage organ systems and disrupt health.** This is primarily a science course and we will read lots of papers from medical journals.

1. To summarize recent research on the health effects of stress, *with special attention to the physiological mechanisms* through which stress impacts health.
2. To introduce the research methods that are currently being used to study psychological stress.
3. To describe in detail the health effects of diverse stressors, from daily hassles to natural disasters. To show that the effects of stress exposure are evident in individual immune cells, in individuals, and our culture at large.
4. To briefly introduce the most popular types of stress management techniques.
5. To enhance critical thinking skills, particularly in regards to reading reports of research studies on biological and behavioral factors in health.

Required Readings: The readings were selected from a huge stack of books and articles and represent the most interesting and straightforward summaries I could find. You can't do well in this class unless you read them!

Course Reader. Available at: The Student Bookstore, (Big Blue) 330 E. College Avenue. . Call them at 237-7616 to confirm that it is there. Be sure to ask if they are out and they'll order one for you. The reader is also on Reserve at Pattee Library. If you have a reader from someone who took this course from me in the past, you should go to the Reserve Reading Room to get new articles that have been added. It is your responsibility to be sure your recycled reader has the right articles.

Background reading for group projects: Greenhalgh, T. How to read a paper: Getting your bearings (deciding what the paper is about). British Medical Journal, 315: 243-246 (July 26, 1999) find it at: www.bmj.com/cgi/content/full/315/7102/243 (8 pgs)

Grading Criteria: Grades will be based on 3 in class exams, 2 homework assignments, and a group project (paper and presentation). There will be very limited opportunity for extra credit, with occasional extra credit questions on exams. 5% of your grade depends on your attendance at group presentations. Further details regarding the group project will be provided in class.

Exams are designed to assess your knowledge, comprehension, and integration of lectures, guest lectures, classroom discussions, assigned reading materials. There are three regular exams and no final exam. They will generally consist of multiple choice questions with a page or two of short answer questions. Exams are designed to take an entire class period and to favor students who have studied hard and done the reading.

Attendance: In order to do well you have to come to class. Your attendance is expected during the regular semester and it is required during group presentations (5% of your grade). I prefer that you do not email me to let me know when and why you will be absent unless you are missing an exam or your group's presentation. I follow the PSU policy on observance of religious holidays.

<http://www.sa.psu.edu/cera/relhol.html>.

Homework must be typed and on time!!! You will be assigned a paper and given specific questions to answer. It will be graded in class on the day it is due. Homework must be typed unless prior permission of the instructor is given. It is due at the beginning of class. Homework can be done alone or by teams of 2 people. Be sure to put names on the top of the paper and to answer every question. No more than two people can work together on homework.

Group project and presentation: The last part of the semester is devoted to preparation and presentation of a research paper on the health effects of stress. In groups of three, students select a topic and prepare a bibliography that must be approved by the instructor. The presentation will be brief (10 min) and the paper is expected to be 15-18 pages long. You will need copies of all the articles on your approved bibliography in order to do the "model and table" assignment in mid march, so getting approval on your bibliography is really important to succeeding in this assignment.

Make-up Policy. Make up exams are essay exams. There will be no make-up exams without 24-hour advance permission from Dr. West or Spring Cooper. If approval for the missed exam was not given in advance, a written medical or other appropriate legitimate excuse must be provided. Weddings and graduations are not legitimate excuses. Make-up exams will be essay exams and must be scheduled within one week of the missed exam. There will be no make-up for the group presentation and you are expected to attend your group's presentation even if you are not speaking. Homework cannot be turned in late. A late group paper will lose 5% per day off the final grade.

Breakdown of Points

Exam 1	15%	multiple choice and short answer
Exam 2	20%	multiple choice and short answer
Exam 3	20%	multiple choice and short answer
Group project model and table	5%	

Final Group Project	25%	(paper 20%, presentation 5%)
homework	10%	(2 assignments, 5% each)
<u>Attendance during presentations:</u> 5%		
There is no final exam.		

Grading ranges:

A = 93-100%	B+ = 86-89%	C+ = 76-79%	F below 60%
A- = 90-92%	B = 83-85%	C = 70-75%	
	B- = 80-82%	D = 60-69%	

Grade Rounding: 0.5 is rounded to next highest whole number

Statement on Academic Dishonesty. As a professor, one of my primary goals is to promote active learning in the classroom and on homework assignments. I believe I owe it to the students who do the work to be vigilant against cheating and I have several methods for reviewing homework, exams, and group projects for evidence of cheating. If you turn in another's work as your own, you should expect an F for the course. Academic integrity is the pursuit of scholarly activity free from fraud and deception. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used or concurrently used in another class without informing the instructor, or tampering with the academic work of other students. Work on exams should be done independently and should not be the result of discussions with others. I keep digital copies of previous semester's papers and bibliographies, and recycling a paper from another semester is clearly plagiarism. It is a violation of academic integrity for students to sign in other students when attendance is taken. **Students should be aware of the rules regarding plagiarism. It is recommended that PSU students visit the following site: Cyber-Plagiarism Site for PSU Students: <http://tlt.its.psu.edu/suggestions/cyberplag/>.**

In this class, exams are to be completed without the help of others.

Group work is only permitted for the group project (paper and presentation), and teams of 2 may do the homework together

Statement on Disabilities The Pennsylvania State University encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact the professor at 863-0176 or the Office for Disability Services at (814) 863-1807 in advance of your participation or visit.

Course Schedule and Required Readings *Spring Semester, 2005*

Professor reserves the right to change the schedule of Class topics and dates of assignments.

Note: page numbers listed here are the original source page numbers, not the new numbers typed on course reader pages.

Date	Class #	Topic	Course Reader
Jan 10	1	Course overview and introduction to Syllabus	
Jan 12	2	Why Study Stress and Health?	Taylor “What is stress?” pp.168-172, 177-184
Jan 14	3	History of Stress Research I	Baum “Stress: The modern concept of stress” pp. 60-69
Jan 17	4	Class cancelled in honor of the Reverend Martin Luther King Holiday	
Jan 19	5	History of Stress Research II: <i>Be ready to discuss Selye’s writings</i>	Selye Ch. 3, 4 & 10 From <u>The Stress of Life</u> with questions sent by email
Jan 21	6	Physiology of Stress I	Seaward “The Physiology of Stress”
Jan 24	7	Physiology of Stress II	Sapolsky Chapter 1 “Why don’t zebras get ulcers?” Sapolsky Chapter 2 “Glands, gooseflesh, and hormones”
Jan 26	8	Physiology of Stress III: Theory of Allostasis	McEwen “Protective and damaging effects of stress...” (not in course reader)
Jan 28	9	Social dominance hierarchies	Sapolsky Chapter 15, “A view from the bottom”
Jan 31	10	<u>Discussion of Stress Measurement Techniques: Bring completed questionnaires to class. Be prepared to discuss the readings in class.</u>	Taylor “What is stress?” pp.185-194 and questionnaires
Feb 2	11	EXAM 1	

Feb 4	12	Review Exam I and discuss Group projects Each person brings one abstract to class!	Generate one or two ideas for project. The topic is: stress AND _____ (any disease, disorder or stressed-population)
Feb 7	13	Cardiovascular disease	Scientific American “Atherosclerosis: The new view” by Peter Libby, From the May, 2002 issue
Feb 9	14	Stress and CVD	Baum, “CV disorders and behavior”
Feb 11	15	Reactivity I: Basic Principles	Turner “Modeling Stress and Assessing Reactivity”
Feb 14	16	Reactivity II: Reactivity Research	(Class cancelled in 2005)
Feb 16	17	Reactivity Research *HOMEWORK DUE!!!* at start of class	Hilmert et al “Audience status moderates the effects of social support...”
Feb 18	18	Psychoneuroimmunology I: Basic principles	Kiecolt-Glaser, 1993 “Mind and Immunity”
Feb 21	19	Psychoneuroimmunology II: Research Findings	Glaser et al, 2000 “Chronic stress modulates the immune response to pneumococcal pneumonia vaccine” (not in course reader)
Feb 23	20	PNI research *HOMEWORK DUE!!!* at start of class	Ironson, et al. PTSD and hurricane Andrew
Feb 25	21	Posttraumatic stress disorder. Video: Trouble in Mind GROUP BIBLIOGRAPHY DUE	DSM-IV Diagnostic Criteria for PTSD Read these diagnostic criteria and make yourself a checklist of symptoms for an in-class assignment
Feb 28	22	Posttraumatic stress disorder	Silver
Mar 2	23	Exam II	
Mar 4	24	Go over Exam II, Review table and model requirements	
Mar 7- Mar 11	No Class	Spring break	
Mar 14	25	Introduction to Coping: models and theories	Taylor, “ Moderators of the stress experience” pp. 202-222, 229-235

Mar 16	26	Personality and coping GROUP TABLE AND MODEL DUE	Sapolsky Chapter 12 “What makes psychological stress stressful?”
Mar 18	27	A new physiology of stress: Tend and Befriend <i>Guest Lecture: Dr. Laura Klein</i>	Taylor, Klein, et al, “Biobehavioral response to stress in females: Tend and Befriend, Not fight or flight”
Mar 21	28	Balancing demands of work and home	Lundberg, 1998 “Work and stress in women.”
Mar 23	29	The biology of the relaxation response	Friedman, Myers, Krass, and Benson, “The relaxation response with cardiac patients”.
Mar 25	30	Meditative Practice to invoke the relaxation response	
Mar 28	31	Social support and Health	Taylor, “Moderators of the stress exp.” pp. 222-229
Mar 30	32	Job Stress and Strain: Dilbert’s World	Hafen, Karren, Frandsen, & Smith. “Job Stress” Taylor “what is stress?” 194-200.
Apr 1	33	Hostility and Health	Williams, “Hostility and the Heart”
Apr 4	34	Short discussion of how to compose a good oral presentation. In-class work on presentations.	Very important class—bring the directions for the group project assignment with you to class.
Apr 6	35	Exam III	
Apr 8	36	Review Exam III	
Apr 11	37	Student Presentations I	Attendance required for all presentations
Apr 13	38	Student Presentations II	Attendance required for all presentations
Apr 15	39	Student Presentations III	Attendance required for all presentations
Apr 18	41	Student Presentations IV	Attendance required for all presentations
Apr 20	42	Class cancelled for groups to finalize papers	<i>GROUP PAPER due at 5pm at Dr. West’s office</i>
Apr 22	43	Student Presentations V	Attendance required for all presentations
Apr 25	44	Student Presentations VI	Attendance required for all presentations
Apr 27	45	Student Presentations VII	Attendance required for all presentations
Apr 29	46	Wrap up	Attendance required

There will be no final exam.