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TEACHING PORTFOLIO

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Teaching Experience

Course descriptions & responsibilities for undergraduate health-rated courses and graduate statistics courses
SPH-H 263 Personal Health (3 cr.)

This survey course provides a theoretical and practical treatment of the concepts of disease prevention and health promotion. Covers such topics as emotional health; aging and death; alcohol, tobacco, and drug abuse; physical fitness; nutrition and dieting; consumer health; chronic and communicable diseases; safety; and environmental health.

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<thead>
<tr>
<th>Semester</th>
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<tr>
<td>Fall, 2009</td>
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<td>Spring, 2012</td>
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SPH-H 180 Stress Prevention and Management (3 cr.)

This course is designed to help students learn about the body’s reaction to perceived stress, mental and physical factors related to stress, and effective coping techniques to help mitigate causes of stress. Students may acquire several stress management techniques that include diaphragmatic breathing, visualization, meditation, and progressive muscular relaxation.

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<thead>
<tr>
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<td>Summer, 2011</td>
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</table>
Teaching Experience

SPH-T 591 Introduction to Statistics in Public Health (3 cr.)

Graduate level statistics class - An applied approach to the collection, organization, analyses and interpretation of data pertinent to public health and vital statistics is outlined. The application of statistical and biostatistical methods to public health is explained.

Responsibilities:
- Co-taught.
- Designed on-line instructional concept demonstration.
- Planned lessons, assignments and exam.
- Assessed student’s progress by grading papers, test, and other work.
- Provided general support and one-to-one assistance for students.

SPH-T 693 Experimental Analysis and Design (3 cr.)

Graduate level statistics class - Principles and resources for designing and analyzing experiments using ANOVA models. Includes between and within subjects designs, factorial arrangements and nested designs, analysis of covariance, trends, statistical power and effect size. Incorporates computer programs.

Responsibilities:
- Taught labs via blended learning approaches.
- Developed extra instruction across various supporting resources to enhance student’s understanding.
- Provided general support and one-to-one assistance for students.
- Planned lessons, assignments and exam.
Teaching Philosophy

It contains my teaching goals and strategies to help students seed in class and future career.
Teaching Philosophy

My goals are to help my students develop abilities to promote healthy life styles and disease prevention tactics, understand credible health information and statistics, analyze the effectiveness of public health programs, and apply the concepts of evidence-based personal and public health in the practice setting. I accomplish these goals by (1) using of thought-provoking methods to facilitate students’ learning and encourage students to learn through stimulating class activities, (2) providing timely feedback and supplementary teaching materials to encourage students to take responsibility for learning, (3) creating collaborative learning environments to explore and evaluate multiple perspectives, (4) connecting the classroom to the real world and encouraging students to use creativity from what they have learned to face challenges, and (5) improving continuously. Below, I provide examples of my methods to support my goals for my students.

1. I use thought-provoking methods to facilitate students’ learning motivation and encourage students to learn through stimulating class activities
One of the most important strategies I use to help students learn better is to increase their learning motivation. During the middle of my teaching career, I started to use competitive educational activities such as “Exam Review Jeopardy” to raise my students’ desire to learn and the outcomes were amazing. These thought-provoking activities were not only fun and helpful for students to memorize important concepts, but provided challenging questions to apply what they had learned in class. Students’ exam grades were significantly better than my previous classes that did not use educational activities. Since lots of students suggested in class evaluations that I design more competitive activities, I continued to apply versatile thought-provoking teaching strategies such as real-life case studies and mapping. The evidence of the effectiveness from better grades, course evaluations, and teacher-student interactions shows why thought-provoking methods and stimulating class activities are so important among my various teaching tactics.

2. I provide timely feedback and supplementary teaching materials to encourage students to take responsibility for learning with an independent path
When I was the lab instructor and co-teaching graduate level statistics courses, I found that one of the challenges to teach an introductory statistics class was to handle the inequality of students’ previous knowledge of mathematics and statistics. Before the lab sessions, preliminary learning modules were given to students to prepare the lab exercises. I always provided timely feedback (e.g., detailed correction of mistakes in an electronic format), and noticed broad patterns of difficulties from the learning modules and assignments. My sensibility of students’ problems with my feedback helped students tremendously to deal with challenging lab work because I received many emails that showed their appreciation. Moreover, I also created additional online teaching handouts and videos to encourage students to take responsibility in their learning. The handouts usually served as deeper discussion and summary to clarify common errors I observed. The videos allowed students to work on their own path in learning complex concepts and statistical software packages (e.g., IBM SPSS). These materials were self-explanatory with detailed steps which are extremely beneficial for students with limited math/statistics.
Teaching Philosophy

knowledge. The thankful messages I received and increased student confidence levels in doing lab exercises and homework confirmed that how critical this teaching method was, especially for statistics courses.

3. I create collaborative learning environment to explore and evaluate multiple perspectives
I believe that teamwork and being open-minded and independent to find valid answers have become important abilities for students to succeed in their future career. I designed innovative health group projects to give students opportunities to engage in research activities. Students had to write literature reviews collaboratively based on finding relevant peer-reviewed journal articles on a specific health topic. At the end of the class, they compiled their conclusions and prepared materials to present their work for the entire class. During the semester, I constantly worked with each group to make sure they made progress with a similar workload from each group member. The effectiveness of the collaborative project was examined by peer evaluation, self-evaluation, and instructor evaluation with a clear rubric.

4. I connect the classroom to the real world and encourage students to use creativity from what they have learned to face challenges
According to Bloom's taxonomy of the cognitive learning domains (from remembering to creating), the highest level of knowledge is to use learned knowledge to create new ideas or systems. One of my teaching goals is to train students to apply what they have learned in class and use creativity to disentangle the real-world problems or enhance personal health. From my graduate-level statistics teaching experiences, the final research project gave such training opportunities for students because the major components of the project were to (1) design survey questions, (2) distribute their surveys, (3) analyze the responses, and (4) write an intensive analytic paper that can potentially be published in refereed journals. In my undergraduate courses, the final project allows students to use the health theories and practical behavioral change techniques to create their own plans, take actions to improve their health, and evaluate the outcome. These projects gave students the opportunity to put into practice the knowledge acquired with their creativity to face public and personal health challenges.

5. I improve continuously
Being an outstanding instructor is a continuous process rather than an end goal. My course evaluations have improved substantially and I have received above 3.6/4.0 for most categories. However, I will keep polishing my teaching skills and extend pedagogical methods by using state-of-the-art teaching-aid tools, seeking positive and constructive feedback from students and faculty members, reviewing recorded videos of my lectures, and attending pedagogical classes. I will continue strengthening my teaching and pedagogy in any professional position I may hold to ensure that students will succeed in class and future career.
Sample Courses

Courses include: H263 (Personal Health) & H180 (Stress Prevention and Management) for undergraduates; T591 (Introduction to Statistics in Public Health) & T693 (Experimental Design and Analysis) for graduate.
A Prologue to H263: This activity is completed at the end of the first class meeting and intended to show students an overview of 8-week H263 class.

Jeopardy: This activity is used for exam review. Students have chance to win the extra credits through the competition.

Case Study: This activity is to provide a more thorough analysis of a real situation related to cardiovascular disease.

The list is posted at least two days prior to each class. It also includes readings and other class logistics to help students get prepared.

Ch 12 – Cardiovascular Disease

College Health Project contains 3 parts - presentation, proposal and peer evaluation. Group work is effective at helping students learn from one another and develop good working relationships with people who may be different from them.

Photo Elicitation Project is the major assignment in the course. It contains two parts. This paper is highly personal and offers the students an opportunity to apply what she/he learned in class to their real life.
Sample Course - H263

Indiana University
School of Public Health
Department of Applied Health Science

H263: Personal Health
Section 17399, Spring 2012
Tue & Thurs 4-6:30pm
Fine Art (FA) 015

Course Syllabus

Instructor: Brian Chen
Email: brichen@indiana.edu
Office: Arbutus House (AHS Annex) #201
Office Hours: Tuesdays 2:30-3:30 or by appointment

Assistant: Dennis Daniels, Jr.
Email: Oncourse Email through 'Messages'

Course Description: The main purpose of this course is to examine concepts of personal health from theoretical and practical perspectives, and discuss the decisions we make that influence our health individually and collectively as a society. Another important objective is to examine the fundamentals of disease prevention and health promotion because of their relation to personal health. This course will also introduce students to the wealth of personal health services that are offered on campus.

Course Objectives: By the end of the course, students will be able to:
- understand common health problems and prevention of illness.
- assess students’ individual levels of wellness and understand effective strategies to improve personal health.
- identify credible health information and sources when seeking help to make optimal health-related decisions.
- identify a lifestyle change to improve overall wellness.
- further develop health related skills and knowledge to promote health and wellness.

Course Materials:
1. Required Text:
2. Additional Readings:

Course Requirements and Grading:
The final course grade will be based on your performance on group work, individual assignments, exams and your class participation.

<table>
<thead>
<tr>
<th>Exams:</th>
<th>35%</th>
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<tbody>
<tr>
<td>Individual Assignments:</td>
<td>25%</td>
</tr>
<tr>
<td>Group Work:</td>
<td>20%</td>
</tr>
<tr>
<td>Class Participation:</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grading Scheme
- 95% ≤ A
- 90% ≤ A-
- 87% ≤ B+
- 83% ≤ B
- 80% ≤ B-
- 77% ≤ C+
- 73% ≤ C
- 70% ≤ C-
- 67% ≤ D+
- 60% ≤ D-
- Blow 60% = F

Do not ask to have your grade changed or rounded up. There must be a set cutoff somewhere, and this is where it will be.

1. Exams:
Two exams will be given on the dates provided on the course schedule. A list of key concepts for review will be provided prior to the exam. The format of the exam will be: (1) multiple-choice and (2) fill in the blanks. Most of exam questions require you to memorize critical definitions and apply knowledge rather than reproduce facts only.

Make-up exam:
Make-up exams will only be provided for students with legitimate documentation under appropriate circumstances. Legitimate documentation will be kept for my records. Thus, please make copies for yourself if necessary.

2. Individual Assignments:
Throughout the semester, individual assignments (e.g., “Photo Elicitation Project, Warm-up & Feedback for Course Module) will be announced that reflect the current class material. These assignments may be journal entries, an assignment from the workbook, or an extra-curricular activity. An assignment may include more than one activity (e.g., journal pages and a workbook). The instructions will be posted on Oncourse under “Resources, Individual Assignments”.
3. Group Work:
Group work (e.g., College Health Project [CHP]) allows you to work with and learn from your classmates. Students must work in groups of 4-5. Each group will be required to work on group projects. The group work may be group presentation, group paper, etc. The instructions will be posted on Oncourse under “Resources, Group Work”.

- Pick your own groups.
- Each group member must work together with an even workload.
- Each group member must report noncooperation incidents.
- The level of your involvement will affect your group work grades.
- Student must attend the meetings, keep good communication with your group mates and complete assigned work.

4. Class Participation:
All students are expected to be prepared, attend and participate all classes. If you miss a class for any reasons, it is your own responsibility to obtain notes from your classmates.

Class participation will be divided into two categories:

**Overall Performance**
- Throughout the semester, students will be evaluated on their
  (1) preparation
  (2) attendance/promptness
  (3) class conduct/behavior
  (4) listening skills
  (5) level of engagement during classes

**In-class Activities**
- The students are also required to participate actively in class activities. Activities may be in the form of pop-quizzes, written responses to guest speakers, group activities, etc.
- Course Policies - 4. Make-up policy

5. Extra Credit Opportunities (up to 3%):
From time to time, there might be extra credit possibilities. I will let you know about those opportunities as they become available. Do not depend on extra credit to salvage your grade in this class.

There are various opportunities to earn extra points:
During the lectures
• Answer specific questions and get the correct answers.
• Win the competition of in-class activities (e.g., puzzle, Jeopardy, etc.)

Assignments/Exam
• I will post instructions via Oncourse under “Resource, Extra Credit Opportunities” (e.g., research paper of a specific health topic).
• I may make bonus questions on the exams.

Course Format:

1. Lectures:
This course will be mainly carried out by lectures by both the instructor and guest speakers. Lecture notes of all lectures will be posted on Oncourse in advance of each class. Students must bring the notes to class; hard copies of notes will not be provided in class. Revision of notes is possible and will be announced via Oncourse or in class. It is the complete responsibility of the student to access all necessary information and assignments from Oncourse.

2. To-Do Lists:
The instructor will provide a to-do list at least two days prior to each class, which will be posted on Oncourse. The instructor will announce chapters to read as well as other class logistics via the to-do list. Students are expected to check the to-do list before and after every class and before exams.

3. Activities:
In this course, we will rely heavily on interactive and collaborative learning methods through some game playing (e.g., puzzles, Jeopardy, etc.), digital storytelling, group discussion, concept mapping, etc. Students must engage in classroom discussions and activities. Students are required to interact closely with instructor. Consequently, it will maximize the opportunities to get best grades and learning outcomes.

4. e-Course Module(s):
The purpose of the e-Course module(s) is to help you overcome the potential learning difficulties due to the insufficient knowledge of some medical terminologies. In addition, it is designed to well prepare you to successfully complete the corresponding intensive case study and have great control of the related quiz.
5. **Student Presentation:**
Students will present their group projects at the end of the semester.

### Course Policies:

1. **Academic Honesty:**
   Academic and personal misconduct by students in this class are defined and will be dealt with according to the procedures in the IU Code of Student Rights, Responsibilities, and Conduct (find the code at http://www.iu.edu/~code/code/index.shtml). Included among dishonest behaviors in an academic setting are cheating (using or attempting to use unauthorized assistance, materials, information, or study aids in an academic exercise), fabrication (falsifying or inventing information in an academic exercise), plagiarism (adopting or reproducing of ideas, words, or statements of another person without appropriate acknowledgment), interference (stealing, changing, destroying, or impeding another student’s work), and facilitating (intentionally or knowingly helping or attempting to help another student commit an act of academic misconduct).

   Such misconduct, regardless of degree, will not be tolerated and will be referred to the IU Division of Student Affairs for possible sanction. Students who conduct academic dishonesty may be given an F* course grade which can never be replaced on the transcript by retaking the course.

2. **Classroom Etiquette:**
   Because of the distracting nature, use of electronic devices such as laptops and tablets is allowed for only course-related purposes. Audio and video recording is not allowed unless prior approval by the instructor. Please mute all electronic devices during class. Cell phone rings and inappropriate use of electronic devices during classes will result in poor grades of class participation and the student may be asked to leave the classroom.

   Carrying on personal conversations during class sessions is disruptive to those around you and interferes with learning. Carrying on personal conversations or engaging in other behavior that interferes with student learning with result in very poor grades of class participation. Students who are chronically disruptive may receive poor class participation grades and be asked to drop the course.

3. **Re-evaluation of Assignments and Exams:**
   If you have a concern about a grade of your exam or assignments, you can submit a brief written request for a re-evaluation within 3 days of receiving a grade. Please clearly state why you believe a re-evaluation
is warranted. However, change of grades is not guaranteed.

4. Make-Up Policy:
Homework, work submitted after in-class activities and exams cannot be made up, unless you have:
- documented death of a family member
- documented emergency or serious illness issued by a health care provider (e.g., IU Health Center)
- documented attendance an academic conference, and
- documented religious holiday with the instructor’s approval based on the official Indiana University form

Only legitimate documentation for your absence will be accepted if presented upon your return to the next class. These documents will be kept for official class records. Please make extra copies for yourself if necessary. I reserve the right to refuse any make-up.

5. Students with Special Needs:
If you are a student with a special need of any type, please discuss this with the instructor.

6. Religious Observances:
In accordance with the Office of the Dean of Faculties, any student who wishes to receive an excused absence from class must submit a request form available from the Dean of Faculties before the end of the student’s first week of class. Information regarding the policy on religious observation can be found at the following website: http://www.indiana.edu/~vpfaa/holidays.html

7. Course Evaluations:
It is the policy of the School of Public Health to evaluate all courses taught through the School. Final student course evaluations will be conducted in a manner that maintains the integrity of the process and the anonymity of the evaluators.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Homework Due</th>
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<tbody>
<tr>
<td>3/06</td>
<td>Introduction to Personal Health</td>
<td>Ch01</td>
<td></td>
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<tr>
<td></td>
<td>The Basics of Healthy Change (Part I)</td>
<td></td>
<td></td>
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<tr>
<td>3/08</td>
<td>The Basics of Healthy Change (Part II)</td>
<td>Ch01</td>
<td></td>
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<tr>
<td></td>
<td>Photo Elicitation Project</td>
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<tr>
<td>3/13</td>
<td>Spring Break – No Class!</td>
<td></td>
<td></td>
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<tr>
<td>3/15</td>
<td>Spring Break – No Class!</td>
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<tr>
<td>3/20</td>
<td>Managing Your Stress</td>
<td>Ch03</td>
<td>Photo Elicitation Project (Part I)</td>
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<td>CHP Proposal Meeting</td>
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<td>Ch06</td>
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<td>STIs &amp; HIV/AIDS</td>
<td>Ch13</td>
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<td>3/29</td>
<td>Complementary and Alternative Med.</td>
<td>Ch17</td>
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<td>4/05</td>
<td>Nutrition and You</td>
<td>Ch09</td>
<td>College Health Project Proposal</td>
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<td>Tobacco</td>
<td>Ch08</td>
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<td>4/10</td>
<td>Cardiovascular Disease</td>
<td>Ch12</td>
<td>Warm-Up &amp; Feedback for Course Module</td>
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<td>Case Study Discussion Section</td>
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<td>4/12</td>
<td>Personal Fitness</td>
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<td>College Health Project Presentation</td>
<td>Ch02</td>
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<td>Group #: 1, 2, 3 &amp; 4</td>
<td>Ch07</td>
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<td>4/19</td>
<td>College Health Project Presentation</td>
<td>Ch07</td>
<td>College Health Project</td>
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<td>Group #: 5, 6 &amp; 7</td>
<td>Ch10</td>
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<td>4/24</td>
<td>College Health Project Presentation</td>
<td>Ch08</td>
<td>College Health Project</td>
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<td></td>
<td>Group #: 8, 9 &amp; 10</td>
<td>Ch12</td>
<td></td>
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<tr>
<td>4/26</td>
<td>Overall review and conclusion</td>
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<td>Photo Elicitation Project (Part II)</td>
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<td>5/01</td>
<td><strong>Online Final Exam (5-7pm)</strong></td>
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Note: Schedule subject to change; announcements will be made in class. Each assignment is due at the beginning of class on the due date as indicated.
Assignment Due:

- [What assignment is due on this day]
- No assignment is due.

Materials to Be Discussed:

- [What documents will be discussed in class. You must bring the printed lecture slides to class. No hard copies of any documents will be provided in class.]
  - Course Syllabus
  - Lecture slides: Ch01_Lec Note.pdf

Class Activities:

- [What we will do in class]
  - Go through course syllabus and discuss course format, requirements, and policies.
  - Ice-breaking activities with the instructor and classmates.
  - Start the first lecture: “Definition of Health” and “Improving Health”

Class Preparation:

- [What you are expected to do to prepare for the class]
  - Read the course syllabus thoroughly!
  - Read the book chapter(s) listed in course syllabus: HEALTH chapter 1, Ch01_Extra Reading01.pdf & Ch01_Extra Reading02.pdf
  - Note that you can access to the electronic versions of the above materials. Please find the links under “Oncourse, Resources.”
Assignment Due:
- Both hard copy and electronic version of “Photo Elicitation Project – Part I: Photo Essay” are due at 4pm on 3/20.

Materials to Be Discussed:
- Lecture slides: Ch03_Lec Note.pdf
- Group Work: College Health Project [CHP]

Class Activities:
- Lecture: Managing your stress
- Class exercises: Body response activity, mapping your concept, relaxation technique
- Group formation and CHP proposal meeting

Class Preparation:
- Readings: HEALTH chapter 3

Note. Selected Samples of To-Do List.
1. A prologue to H263

**Purpose:** A series of photographs in this photo essay activity is intended to show you an overview of 8-week H263 class. Students will make a personal connection with images such as the plate method to tell a story on a public health issue.

**Instruction:**
- Pair-up with a classmate
- You must choose one picture and give that picture a title and 50-80 words in terms of the perspective(s) of health
- Questions:
  - What is your interpretation of the picture? Is your picture related to any health issue?
  - What does this picture convey?
  - Is your picture reflecting something we can learn in this class?
  - Remember to write your name on the chosen paper
2. Jeopardy

**Purpose:** Personal Health Exam 1 Review. Students will be able to review and explain different concepts and terms associated with the personal and public health.

**Instruction:**
- Using textbook and notes is allowed.
- All answers must be given in the form of a question.
- The game dollars amount is the value added to your game score if you respond correctly, or subtracted from your game score if you respond incorrectly.
- If the contestant (group) answers correctly, control of the board is retained. If control of the board is lost, a new group is drawn.
- The team captain who holds up the responder card first gets the opportunity to answer.
- Before alarm/light stops (approximately 5-second countdown), you must answer the question promptly.
- Contestants don’t need a score greater than zero to play in Final Jeopardy. If the answer is correct, 5 extra points will add to your grade.
- 15 extra points will be added to each member who participates the game in the group with most dollars left!
- **SHOUT OUT YOUR WORDS!!!!!

Full Multimedia Demo Site: [http://pages.iu.edu/~brichen/](http://pages.iu.edu/~brichen/)
3. Case-based Group Discussions

Purpose: Apply classroom knowledge to real life situation

Part I – “Panic”:
"It was 4:36 a.m. She was in a cold sweat and having difficulty breathing. She felt as though she had run a marathon. Fear swept through her—something terrible was going to happen. Panic-stricken, she woke her husband, Jeremy.

"Denise, what is it? Is it a nightmare?"

“No, it’s like I’m having an asthma attack. I feel lightheaded and I can’t catch my breath. My heart feels like it’s beating a thousand times a minute.”

Afraid to upset her husband further, Denise didn’t tell him that an immense feeling of apprehension suddenly overcame her. She got up to drink some water and waited for the anxiety to subside. Her mind was racing. Jeremy had a family history of heart disease. This couldn’t be happening to her. It was his problem. A few months earlier Jeremy was diagnosed with coronary artery disease. He was only 48 years old, the same age as Denise. The scare had encouraged him to gradually end years of chain smoking and adopt a healthier lifestyle. He was currently working on giving up the occasional cigarette for good.

“No,” Denise thought to herself. “There’s no way this was a sign of heart troubles. I didn’t have a pain in my chest, I’m physically fit, and I have no family history. There’s just no way.”

After assuring herself of this, Denise was somehow able to fall back asleep

Discuss Questions:
• How likely is this to be a heart problem? Asthma? Panic attack? Or...?
• Why do you say this? What are the symptoms that are consistent with your preliminary diagnosis? Is there anything unusual?

Part II – “A Voice from Within”:
The next day at work, Denise was having a hard time focusing. Maybe the stress of her job was finally catching up with her. Managing a catering business was no easy task. On top of that, her only daughter, Emily, had left for college this fall and, being the overprotective parent that she was, Denise found herself constantly worrying about how her daughter was faring in a different city, away from the comforts of home. Also, Denise was starting to go through the early stages of menopause. The hormonal changes, combined with fatigue, stress, and her general worrisome nature, were catching up to her. Not only that, she couldn’t get last night’s scary episode out of her thoughts. Was it just part of the whole perimenopause thing or was it more? Her body was trying to tell her something, but Denise wasn’t sure she was ready to hear.
“I wonder if Denise realizes how all those years of second-hand smoke have taken a toll on her lungs and on ME, her heart! All that tobacco inhalation has constricted her coronary arteries. Sure, Denise tries to stay physically active but genetics and her food choices have brought her blood cholesterol up pretty high to 245 mg/dl. She could be headed for heart disease. A person's total cholesterol level shouldn't get above 200 mg/dl. That's right. I ought to know! Denise has high blood cholesterol level, a major contributor to heart disease. Geesh. Get with it, Denise.

That was a major warning last night. I'm oxygen-starved! Luckily, only a small area of my left ventricle had a big decrease in blood flow and oxygen supply (cardiac ischemia). Thank goodness. If nothing else happens, my body can get some repair work done. Denise didn't experience chest pain (angina pectoris). But her rapid heartbeat and shortness of breath sure got her attention. She had better shape up because I don't know if I can handle much more oxygen deprivation. And, hey, all this unstable plaque lurking around is not a good sign either. No indeed. Who knows when it may rupture? I don't like the looks of this at all.”

Discuss Questions:
• Draw a sketch of the heart and show where the coronary blood vessels lie.
• List in order the blood vessels that a drop of blood would follow as it makes a complete journey around the body starting as it enters the right atrium until it returns to the right atrium.
• What are the characteristics of Denise’s lifestyle that might lead to a heart problem?
• Has Denise suffered a heart attack?
• Define these terms: cholesterol & angina pectoris.

Part III – “Heart Attack Basics”:
It appears that Denise has suffered mild heart trauma, which may lead to a more severe heart attack if not treated. But wait ... isn’t a heart attack when the heart stops beating? Not exactly.

Cardiac arrest is the term used when the heart muscle literally stops pumping blood. A heart attack, also known as a myocardial infarction, may lead to cardiac arrest, but it’s defined as a sudden event where at least one of the three major coronary arteries becomes partially or totally blocked, usually by a blood clot (thrombus).

Heart cells can live for about 20 minutes without oxygen. The loss of oxygen-rich blood to the heart cells during a heart attack leads to cell damage, which may be permanent and lead to death of heart cell, depending on the severity of the attack and the amount of heart tissue that the blocked artery supplies. The area of infarction is where dead (heart) cell occurs, if it does. Surrounding it is the area of injury, which may or may not suffer permanent damage. The outermost affected area is the zone of ischemia, which is weakened but regains function within two to three weeks.
3. Case-based Group Discussions (cont.)

It is a misconception that having a heart attack leads to chronic coronary artery disease (CAD). In reality, CAD and accompanying atherosclerosis (hardened, narrowed arteries) is the number one cause of heart attacks. What causes CAD? The main culprit is atherosclerosis, or plaque buildup in the coronary arteries. Plaque is a material composed mainly of lipids, cholesterol (lipoproteins), and calcium. Cholesterol (a type of lipid necessary for synthesis of hormones, vitamin D, and bile) is carried through the bloodstream by two main types of lipoproteins: high-density lipoproteins (HDLs) or “good” cholesterol, and low-density lipoproteins (LDLs) or “bad” cholesterol. Studies by the American Heart Association and the well-known NHLBI-supported Framingham Heart Study show that HDLs help prevent heart disease by transporting lipids and cholesterol from the arteries to the liver. LDLs, which contain more fat and less protein, are unstable and stick to artery walls to help contribute to plaque formation.

LDLs produce toxins that form tiny lesions on the inner walls of arteries. These lesions attract triglycerides and other substances in the bloodstream. White blood cells (inflammatory system) rush to the injury site, but cause the inner wall to become stickier and thus attract more LDLs. Platelets (blood-clotting system) collect at the lesion site, only to trap more lipids and white blood cells. Plaque build-up slowly occurs. (Note that cholesterol is not the sole cause of plaque formation.)

Part IV – “Call 911”:
It was March. Emily was home for spring break and Denise was enjoying having her 19-year-old daughter around. Unfortunately, it was going to be hard to spend much time with her because it was that time of the year when weddings and other catered events were picking up again after the post-New Year’s lull. Denise was feeling the pressure pile up again. She constantly felt fatigued and out of breath, but she attributed these to perimenopause.

Emily could sense that her mother was tense and out of sorts, so she planned a relaxing evening for her parents and offered to cook mushroom lasagna, her mother’s favorite dish. All was going well until dessert, when Emily noticed her mother’s face growing paler by the minute. Suddenly, just like that night back in October, Denise began to have severe trouble breathing and her heart began racing. The room began to spin and, without warning, she fainted on the dining room floor.

“Oh my God! Dad, call 911!”

“Uh oh. Oh! Oh no! Denise. Denise! Do you read me? I’m in the middle of a heart attack!! I know it. I can feel it! That plaque in your left anterior descending coronary artery just ruptured. Now everything is going crazy. Everyone in the whole body seems to be swimming by. High level of C-reactive protein (CRP) is combining with your high blood serum cholesterol. BAD things are happening, Denise. Really, really BAD!”
3. Case-based Group Discussions (cont.)

Plaque ruptures. The blood clot grows...too big. Oh too big. Is it going to break? Say it isn't going to break. Not thrombosis, please....
... It’s been 10 minutes since my heart cells supplied by the blocked artery have been without oxygen. If something isn’t done soon, my cells are going to die. Necrosis! I never thought I could say that word. They say a heart attack can take over four to six hours. This first hour is horrible—the most critical period. Parts of the blood clot may break loose, travel in the blood, and stick in some tiny little blood vessel. My God, it could get in a coronary artery or the brain! An embolism. I need help! Now... NOW, HELP!!
I’ve got to get myself in hand. It’s the only way in a crisis. Right? Right! Why didn't Denise go to her doctor to complain about her chronic breathlessness, fatigue, and nausea? All this stress elevated her blood pressure and further increased her risk for a heart attack. Alright, so she didn’t know that she had a mutation in her LDL. How could she know that LDL was not being efficiently removed from her blood? Whatever. At least she should have known her LDL blood levels were very high. So were her levels of lipoprotein. This stuff increases heart disease risk. Why didn't anyone warn her?

Sure, I know I’m involved. I’m taking it personally. Wouldn't you? But maybe, just maybe, if Denise had been more aware of the symptoms of heart disease she would have sought help. I happen to know that heart attacks are the number one cause of death in the U.S. More people die from cardiovascular disease (including heart attacks, atherosclerosis, and hypertension) each year than the next six leading causes of death combined, including cancer and automobile accidents. It’s an epidemic that people need to be educated about. So get it. I’m here to tell you. Denise. If you won’t listen to me, who will you listen to?

Discuss Questions:
- What does C-Reactive Protein (CRP) indicate?
- What are plagues and what do they have to do with Denise’s heart problem?
- What are the recommended levels of HDL and LDL for adults?
- What does LDL have to do with heart attacks?
- If you’re with a person who might be having a heart attack and he or she is unconscious. You may be advised to begin cardiopulmonary resuscitation (CPR). What is the new recommended way to do CPR?
Chap 12 Cardiovascular Disease

(1) Most Pictures & Videos for this PowerPoint:
www.adam.com
www.mayoclinic.com
www.aha.org

(2) Extra Credit Opportunities
Q & A
Matching (5 points for each)
Multiple Choice (5 points for each)
Wheel of fortune (2-10 points for each)

How to play:
(1) There are total of 13 questions.
(2) Everyone can answer ONLY 1 question.

Group #4: Do you know someone who has had a heart problem?
Share your story...

FOCUSED TOPICS

1. Overview (Epidemiology)
2. Understanding the Cardiovascular System
3. Types of Cardiovascular Disease
4. Reducing Your Risk for CVD
5. New Weapons Against Heart Disease

Cardiovascular Disease in the United States:
An Epidemiological Overview

- 37% of all deaths in the U.S.
- For all ages combined, CVD is the leading cause of death
- More than 147,000 Americans killed by CVD each year are under the age of 65
- 60 million Americans have some type of CVD (2007)

Group #2
Even though we know heart disease has been the number one killer in the U.S. for decades, why haven't we made more headway in decreasing the rates?
Chap 12 Cardiovascular Disease (cont.)

Prevalence of Cardiovascular Diseases in Adults Ages 20 and Older by Age and Sex

Do you think college students with heavy drinking will increase the chance of heart disease in the future? Why?

Research shows heavy drinkers with higher CRP.
1. C-reactive protein (CRP) and heart disease are related.
2. 25 college-aged men and women completed survey.
3. 3 groups: non-drinkers, <6 drinks per week, moderate drinkers, >6 drinks per week, & heavy drinkers (3 or more drinks).
4. Heavy drinkers had a CRP of 1.25mg, suggesting they were at moderate risk for future heart disease. Moderate drinkers fell into the low-risk group with CRP of 0.5mg.
5. More research is needed to support the research.

FOCUSED TOPICS

1. Overview (Epidemiology)
2. Understanding the Cardiovascular System
3. Types of Cardiovascular Disease
4. Reducing Your Risk for CVD
5. New Weapons Against Heart Disease

Understanding the Cardiovascular System

The heart: A Mighty Machine

Four chambers:
- Two upper chambers called atria
- Two lower chambers called ventricles

Valves regulate the flow of blood

How the Heart Works

- Deoxygenated blood enters right atrium
- Travels to right ventricle
- Through pulmonary artery to the lungs (receives oxygen)
- From lungs to left atrium of heart
- Forced into left ventricle
- From left ventricle through aorta to all body parts

Q&A: Review (5 extra credit)
Please point to the coronary artery.

A: This is the aorta; it supplies blood to body and not the heart.

B: They are coronary arteries. They deliver blood to the heart.
Chap 12 Cardiovascular Disease (cont.)

FOCUSED TOPICS

1. Overview (Epidemiology)
2. Understanding the Cardiovascular System
3. Types of Cardiovascular Disease
4. Reducing Your Risk for CVD
5. New Weapons Against Heart Disease

Types of CVD
- Atherosclerosis
- Angina Pectoris
- Congenital heart disease
- Rheumatic heart disease
- Congestive heart failure
- Atherosclerosis
- Stroke

Percentage Breakdown of Deaths From Cardiovascular Diseases

- Coronary heart disease, 32%
- Stroke, 17%
- Congestive heart failure, 26%
- Diabetes, 6.0%
- Rheumatic heart disease, 0.6%
- Other, 13%
- High blood pressure, 6%

Metabolic Syndrome

- Metabolic Syndrome (Syndrome X) dramatically increases the risk of heart diseases & diabetes
- Central obesity
- High blood pressure
- High triglycerides
- Low HDL-cholesterol
- Insulin resistance

1. Atherosclerosis (Coronary Artery Disease)

- A type of arteriosclerosis – deposits of fatty substances, cholesterol, cellular waste products, calcium and fibrin.
- Often called coronary artery disease (CAD) because of the resultant damage to the coronary arteries
- 4 Factors:
  - inflammation
  - high blood pressure
  - tobacco smoke
  - high cholesterol & triglyceride level

2. Coronary Heart Disease

- Single greatest killer
- CHD = Myocardial Infarction (MI) or Heart Attack!!
Chap 12 Cardiovascular Disease (cont.)

3. Angina pectoris (chest pains)
   - Ischemia – reduction of heart's blood & oxygen supply
   - Treatments include nitroglycerin, calcium channel blockers or beta blockers

4. Arrhythmias
   - Irregularity in heart rhythm
   - Fibrillation – rapid, irregular contraction of muscle fibers
   - Over 4 million Americans diagnosed

5. Congestive Heart Failure (CHF)
   - Over 5 million Americans
   - Single most frequent cause of hospitalization in U.S.
   - In some cases, the damage is due to radiation or chemotherapy treatments for cancer

6. Congenital and rheumatic heart disease
   - Congenital heart disease:
     - 1 in 125 children (present at birth)
     - It may be caused by maternal disease such as rubella
     - It also may be caused by chemical intake during pregnancy
   - Rheumatic heart disease:
     - caused by untreated streptococcal infections of the throat
     - Usually occurs in children five to 15 years old

7. Stroke
   - Blood supply to brain is interrupted
   - Thrombus (blood clot); Embolus (a clot floating in the bloodstream)
   - Aneurysm (a widening in blood vessel that causes bulge or burst)
   - 6 million Americans suffer every year

Q & A – Matching (35 extra credits):
- Heart attack
- Angina pectoris
- Congestive heart failure
- Metabolic syndrome
- CAD
- Stroke
- Oxygen deprivation that may cause speech or memory problems
- Chemotherapy has damaged the heart, causing reduced blood flow
- Characterized by deposits of fatty substances
- Characteristics include weight gain and insulin resistance
Chap 12 Cardiovascular Disease (cont.)

Fortified Topics

1. Overview (Epidemiology)
2. Understanding the Cardiovascular System
3. Types of Cardiovascular Disease
4. Reversing Your Risk for CVD
5. New Weapons Against Heart Disease

Definition of Cholesterol

- A waxy substance, technically a steroid alcohol, found only in animal fats and oils used in making cell membranes as a building block for some hormones, in the fatty sheath around nerve fibers, and in other necessary substances.

Too much cholesterol

- Builds up plaque and blocks blood vessels that supply the heart muscle (myocardium) with oxygen and nutrients.
- National Cholesterol Education Program
  - Keep cholesterol levels below 200 mg/dl

HDL Cholesterol

- HDL’s act as “scavengers” and remove cholesterol from the body preventing plaque from forming in the arteries.
- HDL’s are the “good guys” even if you have high cholesterol.

Blood Pressure Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Systolic (mm Hg)</th>
<th>Diastolic (mm Hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt; 120</td>
<td>&lt; 80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120-159</td>
<td>80-89</td>
</tr>
<tr>
<td>Hypertension</td>
<td>≥ 160</td>
<td>≥ 100</td>
</tr>
</tbody>
</table>

Reducing Your Risk for Cardiovascular Disease

- Risks you can control
  - Avoid tobacco
  - Reduce saturated fats
  - Maintain a healthy weight
  - Cut back on saturated fats and cholesterol
    - Lower-density lipoproteins (LDL)
    - High-density lipoproteins (HDL)
    - Triglycerides
  - Changing lifestyle vs. cholesterol lowering drugs
Chap 12 Cardiovascular Disease (cont.)

Reducing Your Risk for Cardiovascular Disease (cont.)

- Risks you can control (continued)
  - Modify dietary habits
  - Exercise regularly – modest levels, low-intensity even beneficial
  - Control diabetes
  - Control your blood pressure
  - Hypertension (High blood pressure – HIP) the "silent killer"
  - Manage stress

Reducing Your Risk for Cardiovascular Disease (cont.)

- Risks you can NOT control
  - Heredity – a family history of heart disease
  - Age
    - The risk of CVD increase with age for both sexes
    - 75% of all heart attacks occur in people over age 65
  - Gender
    - Men are at greater risk of CVD until old age
    - Women seem to be protected by hormonal factors until menopause
  - Race
    - Blacks are at 45% greater risk for hypertension and thus, heart disease

Signs of Heart Disease Can Start as Early as Your College-Age

1. Evidence shows cholesterol and plaque build up in children as young as 5. Even if you’re in your teens or 20’s, the clock is ticking.
2. A study by the American College of Cardiology found that young men and women in their 20’s two to three times more likely have calcium build up in their arteries by the time they were 35 if they had several risk factors including a high fat high calorie, diet lack of exercise and smoking.

Heart disease starts long before symptoms. So, CONTROL your RISKS RIGHT NOW!!

Q & A: Multiple Choices (5 extra credits):

Which of the following women has a shape that is considered at higher risk for heart disease?
1. A woman shaped like a pear
2. A woman shaped like an apple
3. A woman shaped like an hour glass
4. A woman shaped like a rectangle

All of the following are methods of reducing risk for CVD EXCEPT:
1. Not smoking
2. Reducing your intake of saturated fat
3. Increasing triglycerides in your blood
4. Increasing exercise

The following total cholesterol reading is within the recommended range:
1. 200mg/dl
2. 185mg/dl
3. 200mg/dl
4. 210mg/dl

New Weapons Against Heart Disease

- Techniques for diagnosing heart disease
  - Electrocardiogram (ECG)
  - Angiography
  - Positron emission tomography scan (PET scan)
  - Single-photon emission computed tomography (SPECT)
  - Radionuclide imaging
  - Magnetic resonance imaging (MRI)
  - Ultrasound computed tomography scan (CT)
  - Digital subtraction angiography (DSA)

FOCUSED TOPICS

1. Overview (Epidemiology)
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5. New Weapons Against Heart Disease
Chap 12 Cardiovascular Disease (cont.)

**Extra Credit:**
*Wheel of Fortune Question*

What's different between ECG and echocardiography?

**Wheel of Fortune**

Points

An ECG is a record of the electrical activity of the heart

A more accurate method of testing for heart disease is angiography

Another test option is echocardiography, which uses sound waves to generate images of the heart.

PET SPECT

**New Weapons Against Heart Disease (cont.)**

Bypass Surgery vs. Angioplasty

Group #5: Which one is best for CVD? Why? What are pros & cons of them?

- Has longer recovery time
- More invasive

Use balloon to open artery

May not last long
Chap 12 Cardiovascular Disease (cont.)

Angioplasty
A coronary balloon angioplasty is done under a medical procedure to widen a artery that is narrowed or blocked. A thin tube called a catheter is inserted into the artery and a balloon is inflated at the site of the blockage. A wire mesh tube called a stent is sometimes used to hold the balloon in place. A hole is then made in the balloon to allow for the passage of blood.

Stents

Complex Angioplasty

Bypass Surgery

Group #1
Do you think people tend to view heart surgeries such as angioplasty and bypass as “quick fixes” for a lifetime of bad habits? Justify your answer.

New Weapons Against Heart Disease (cont.)

Aspirin
Low doses of aspirin (81mg) daily
Risks may outweigh the benefits

Cardiac Rehabilitation
Every year, nearly 1 million people survive
Some find it difficult to afford
Benefits of these programs for outweigh any risk

Extra Credit: Wheel of Fortune Question
What is the new recommended way to do CPR?
Chap 12 Cardiovascular Disease (cont.)

Extra Credit: Wheel of Fortune Question
How can aspirin help in preventing heart disease and who should consider aspirin therapy?

CARDIOVASCULAR DISEASE

Thank you
Assignment

Sample Course - H263

Indiana University
School of Public Health
Department of Applied Health Science

H263: Personal Health

Group Work: College Health Project (CHP)

Introduction: Students must complete a 25-minute presentation regarding a college health topic on 4/17, 4/19 or 4/24. This should be an in-depth look at the disease/disorder/issue, and a chance to educate your classmates.

• Form groups and get your topic approved by the instructor on 3/20.
• Discuss two relevant peer-reviewed journal articles on your topic. Provide summaries and explain the connection with your health topic.
• Include two different learning & review activities (e.g., bingo, Jeopardy, digital storytelling, puzzle game, case study and role playing, etc.), engaging and interacting with the whole class.
• Create a presentation that uses Microsoft PowerPoint and other audio/visual materials (e.g., brochures, poster, handouts, etc.). The total length of audio/video clips must not be more than 3 minutes.

Topics:

Sport Injury
Eating Disorders
Depression
Sleeping Issues
Skin Problems

Obesity (Freshman 15)
Drug Abuse
Binge Drinking
Tobacco Use/Addiction
Diabetes

Presentation: Requirements:

• General description or statement about the health topic and the level of college students affected by it. Indicate if the health condition affects one group of college students more than another. Indicate the specificity of the population (i.e., gender, ethnicity, geographic region, etc.)
• Impact on the health and wellness of college students
• Causes and/or risk factors
• Self-help guideline and prevention strategies
• Signs and symptoms
• General treatment/solution methods
• Discuss and summarize two relevant peer-reviewed journal articles about the health topic:
  » Describe the main topic and conclusions. Why this article is “attractive” to your group.
  » What have you learned from the articles?
  » What are the implications of this research/information for your health topic?
• Reference Page
  » Use APA format for citation

Due Date: 1. Electronic copy:
• Due by 4pm on your presentation date via “Assignments 2, College Health Project”
• Submission requirements:
  » Two relevant peer-reviewed journal articles (Full text of the articles)
  » PowerPoint (Uploaded electronic file)
  » All materials (e.g., handouts and answer keys) related to activities

2. Hard copy:
• Due on your presentation date
• Submission requirements:
  » Cover page:
    * Name: Your group members’ names
    * Title: College Health Project
    * Topic: Your group’s topic
    * Date: Your presentation date
    * Course #: H263
    * Section #: xxxxx
  » Two relevant peer-reviewed journal articles (Full text of the articles)
  » PowerPoint (2 slides per page)
  » All materials (e.g., handouts and answer keys) related to activities

3. Policy on late assignments:
25-point deduction for each missing item after the due time
## Group Work: College Health Project (CHP) Grading Rubric

### Grading Rubric:

<table>
<thead>
<tr>
<th>1. Knowledge presented:</th>
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<tbody>
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<tr>
<th>2. Learning and review activities:</th>
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<tbody>
<tr>
<td>5 Effectiveness to use the activity to help whole class understand the topic and review covered materials</td>
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<tr>
<td>5 Engagement and interaction with whole class</td>
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<tr>
<th>3. Peer-reviewed journal articles: #1</th>
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<tr>
<td>5 Describe the main topic and conclusions. Why is the article “attractive” to your group?</td>
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4. Performance during presentation:

<table>
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<tr>
<th>5</th>
<th>Eye Contact: occasionally looks at audience during presentation</th>
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<tbody>
<tr>
<td>5</td>
<td>Posture: stands up straight with both feet on the ground</td>
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<td>5</td>
<td>Clarity and flow</td>
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<td>5</td>
<td>Handouts: provide handouts and reference sheet for whole class</td>
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<tr>
<td>5</td>
<td>Total Time – presentation: 25 minutes</td>
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<td>5</td>
<td>Total Time - video clip: &lt; 3 minutes (Yes or No)</td>
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<td>10</td>
<td>Enthusiasm: demonstrates a strong positive feeling about topic during entire presenta-</td>
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<td>10</td>
<td>Visual Aid/Graphic (PPT &amp; Video): visual aid enhances presentation, all thoughts articu-</td>
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<td>lated and keeps interest</td>
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<tr>
<td>10</td>
<td>Audience Engagement: presentation is organized and the interest level of the audience is maintained</td>
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<td>15</td>
<td>Overall effect of presentation</td>
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</table>

5. Note:

- (___/Max. Score): The points you earn will be based on quality of each grading item.
H263: Personal Health

Group Work: College Health Project (CHP) Proposal

Overview: 1. Introduction: This proposal will provide an overview of your presentation outline. Your group must follow this proposal and CHP grading rubric for your presentation.

2. Due Date:
   • Hard copy: Due at the beginning of class on 4/05
   • Electronic version: Due by 4pm on 4/5 via “Assignments 2, CHP Proposal”
   • If you only submit one of the above copies, 25 points will be deducted.
   • The electronic copy must be the same as the hard copy.

3. Policy on late assignments
   • 10 points will be deducted each day after the due time.

4. Note
   • It will be completed using Adobe Reader.
Proposal Requirements:

1. Job Assignment:
   Indicate the contribution of all members of the group in regards to presentation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Responsible for</th>
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2. Planning:
   Your presentation will cover (describe your focused topics):

   

3. Two different learning and review activities:
   Title of learning and review activity #1:

   How will your group lead the activity (BE SPECIFIC):

   Title of learning and review activity #2:

   How will your group lead the activity (BE SPECIFIC):

4. List all of your peer-reviewed journal articles and eligible sources you will use and research:
   • The sources and journal articles must be approved by the instructor

   Information of the Peer-Reviewed Journal Articles (APA format):


Sources:

5. Other:
Provide the information (e.g., title, link(s) and reference) regarding your visual/auditory aids for presentation

Grading Rubric:

**Excellent (40):**
The responses are specific and comprehensive. There is complete, detailed, and clearly articulated information as to how the criteria are met. The ideas presented are innovative, well-conceived and thoroughly developed.

**Good (30):**
The responses are reasonably comprehensive and include sufficient detail. The contents contain many of the characteristics of responses that are very good even though it may require additional specificity, support or elaboration in places.

**Fair (20):**
The responses are non-specific and lack focus and detail. The responses address some of the selection criteria, but not all. Some ideas presented are sound, but others are not responsive to the purpose of the project. Additional information is needed in order to be reasonably comprehensive and meet the criteria of a response that is good.

**Poor (10):**
The responses do not meet many criteria; provides inaccurate information or provides information that requires substantial clarification as to how the criteria are met; lacks meaningful detail; demonstrates lack of preparation; or otherwise raises substantial concerns about the applicant's understanding of the issue in concept and/or ability to meet the requirement in practice.
### H263: Personal Health

**Group Work: Rating of Yourself and Colleagues**

**Group Name:**

**Your Name (Print):**

Please rate yourself and your group members on each of the dimensions of group work outlined below. Write the first name of your group members with one in each column.

**Give a 4 for excellent, 3 for good, 2 for fair, and 1 for poor.**

<table>
<thead>
<tr>
<th>Dimensions of Group Work</th>
<th>First Name of Each Group Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>You</td>
<td></td>
</tr>
<tr>
<td>Attendance at group sessions</td>
<td></td>
</tr>
<tr>
<td>Engagement in the group activity</td>
<td></td>
</tr>
<tr>
<td>Share his/her understanding of how the material can be applied in the project</td>
<td></td>
</tr>
<tr>
<td>Tasks completed on time</td>
<td></td>
</tr>
<tr>
<td>Quality of contribution</td>
<td></td>
</tr>
</tbody>
</table>
Individual Assignment: Photo Elicitation Project (PEP)

Overview: This project will be divided into two parts, the first part of which is the photo essay and will let you focus on finding your unhealthy behavior, researching on the behavior and planning the strategies to change the behavior. For the second part, you need to monitor your behavior change process, and then write up a paper based on the evaluation of the behavior change.

Part I: Photo Essay (80 points)

1. Introduction:
For the Part I: Photo Essay, you will be required to take one unhealthy behavior that you feel need to be improved or changed (for instance, eating, drinking, smoking, exercise, environmental, relationship behaviors, etc.). You may be as creative as you like with your photograph. To get some ideas, I would suggest you look through textbook or the topics we will be discussing throughout the class.

2. Essay elements:
   • One photo of your unhealthy behavior with a title
     » Photo quality: 600*600 recommended
   • The minimum of 2-page main content must include following:
     » Explain why you chose this behavior.
     » Describe how this unhealthy behavior affects your life.
     » Summarize current research on this behavior:
       * Description
       * Links to diseases
       * Prevalence
       * Benefits of changing the behavior
     » Use the models and strategies from textbook (p.12-21) to develop your behavior change plans.
   • Reference Page:
     » Use APA format for citation.
3. Presentation:

<table>
<thead>
<tr>
<th>Margins</th>
<th>Font</th>
<th>Number of pages</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”</td>
<td>12</td>
<td>Min. 2 pages for main content</td>
<td>double</td>
</tr>
<tr>
<td></td>
<td>Times New Roman</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Others:
- Pagination
  - Number all pages except for the cover page; type your last name before the page number (e.g., Chen 1)
- Include a cover page with
  - Name: Your name
  - Title: Photo Elicitation Project Part I: Photo Essay
  - Date: Month Date, Year
  - Course number: H263
  - Section number: xxxxx
- References
- Stapled

4. Due Date:
- Hard Copy: Submit your hard copy at the beginning of class on 3/20.

5. Policy on late assignments
- 10 points will be deducted each day after the due time

Part II: Evaluation (80 points)

1. Introduction:
For the second part of this project, you must evaluate your behavior change process based on PEP part I (photo essay). Over the course of the term, you must use charts, pictures, journals, video, etc. to keep track of your progress toward changing this behavior and prove your actions. Ultimately, you must write a minimum of 2-page paper evaluating your behavior change process. Please note that the minimum of 2-page required for the paper refers to your paper content; as such, your reference page does not count toward the 2 pages. Combine your PEP part I and part II to a full project.
2. Main Content:
   • Did you make any progress over the duration of class?
   • What was difficult about changing the behavior?
   • What strategies did you use?
   • Did you follow the plan described in your photo essay? Did it work or not? Why? Will additional changes aid you in achieving your goals in the future?
   • What helped you in changing this behavior?
   • What are some long-term benefits of changing this behavior for you?
   • How can you apply the things you’ve learned from class to change unhealthy behaviors? Please include information directly learned from this class, citing your source (for instance, you can say “from class discussion” or “from the text” or “according to the guest speaker’, etc.).
   • Provide a summary of your thought/emotional process you went through during the 8 week term.

3. Presentation:

<table>
<thead>
<tr>
<th>Margins</th>
<th>Font</th>
<th>Number of pages</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>12 Times New Roman</td>
<td>Min. 2 pages for main content</td>
<td>double</td>
</tr>
</tbody>
</table>

Others:
   • Pagination
     » Number all pages except for the cover page; type your last name before the page number (e.g., Chen 1)
   • Include a cover page with
     » Name: Your name
     » Title: Photo Elicitation Project (Part I & Part II)
     » Date: Month Date, Year
     » Course number: H263
     » Section number: xxxxx
   • References
   • Stapled

4. Submission Requirements:
   • Incorporate your part I and part II into a full project.
• Your tracking charts, journal, pictures, etc. (for the purpose of proving you did take actions to change your behavior)
• 25-point deduction for each missing item after the due time.

5. Due Date:
• Hard Copy: Submit your hard copy of PEP (Part I & Part II) at the beginning of class on 4/26.
• Electronic Copy: Upload your electronic version to “Assignments 2, PEP Part II” by 4pm on 4/26.

6. Policy on late assignments:
• Late submission is NOT acceptable!!
**H263: Personal Health**

**Individual Assignment: Photo Elicitation Project (PEP) Grading Rubric**

**Name:**

**Grading Rubric:**

<table>
<thead>
<tr>
<th><strong>1. Format/Layout:</strong></th>
<th></th>
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<tbody>
<tr>
<td>• Presentation of the text</td>
<td></td>
</tr>
<tr>
<td>• Structuring of text</td>
<td></td>
</tr>
<tr>
<td>• Follows requirements of length, font and style</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>70-80</th>
<th>Closely follows all the requirements related to format and layout.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-70</td>
<td>Follows, for the most part, all the requirements related to format and layout. Some requirements are not followed.</td>
</tr>
<tr>
<td>0-60</td>
<td>Follows poorly the requirements related to format and layout.</td>
</tr>
</tbody>
</table>

Part I Total: ________ *15% = ____________

Part II Total: ________ *15% = ____________

**2. Content/Information**

<table>
<thead>
<tr>
<th>70-80</th>
<th>The paper is objective and addresses with an in depth analysis all the issues referred in the proposed topic. The provided information is necessary and sufficient to discuss these issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-70</td>
<td>The paper is objective and for the most part addresses with an in depth analysis most of the issues referred in the proposed elements. The provided information is, for the most part, necessary and sufficient to discuss these issues.</td>
</tr>
</tbody>
</table>
3. Quality of Writing:
- Clarity of sentences and paragraphs
- No errors and spelling, grammar and use of English
- Organization and coherence of ideas

<table>
<thead>
<tr>
<th>0-60</th>
<th>The paper is not objective and addresses poorly the issues referred in the proposed elements. The provided information is not necessary or not sufficient to discuss these issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I Total:</td>
<td>____________*50% =</td>
</tr>
<tr>
<td>Part II Total:</td>
<td>____________*50% =</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>70-80</th>
<th>The paper is well written from start to finish, without spelling, grammar or use of English errors. The paper is well organized, clear and presents ideas in a coherent way.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I Total:</td>
<td>____________*20% =</td>
</tr>
<tr>
<td>Part II Total:</td>
<td>____________*20% =</td>
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</table>

<table>
<thead>
<tr>
<th>60-70</th>
<th>The paper is well written for the most part, without spelling, grammar or use of English errors. The paper is for the most part well organized, clear and presents ideas in a coherent way.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>0-60</th>
<th>The paper is not well written, and contains many spelling errors, and/or grammar errors and/or use of English errors. The paper is badly organized, lacks clarity and/or does not present ideas in a coherent way.</th>
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</thead>
<tbody>
<tr>
<td>Part I Total:</td>
<td>____________*20% =</td>
</tr>
<tr>
<td>Part II Total:</td>
<td>____________*20% =</td>
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</tbody>
</table>

4. References and use of references:
- Scholarly level of references
- How effective the references are used in the paper
- Soundness of references
- APA style in reference list and for citations

<table>
<thead>
<tr>
<th>70-80</th>
<th>All the references used are important, and are of good/scholarly quality. There is a minimum of 2 scholarly resources that are used effectively in the paper. All the references are effectively used, correctly cited and correctly listed in the reference list according to APA style.</th>
</tr>
</thead>
</table>
### Assignment

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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<tbody>
<tr>
<td>60-70</td>
<td>Most of the references used are important, and are of good/scholarly quality. There is a minimum of 2 scholarly resources that are for the most part used effectively in the paper. Most of the references are effectively used, correctly cited and correctly listed in the reference list according to APA style.</td>
</tr>
<tr>
<td>0-60</td>
<td>Most of the references used are not important, and/or are not of good/scholarly quality. There is not a minimum of 2 scholarly resources, and/or they are not used effectively in the paper. References are not effectively used, and/or correctly cited and/or correctly listed in the reference list according to APA style.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part I Total:</th>
<th>*15% =</th>
<th>Part II Total:</th>
<th>*15% =</th>
</tr>
</thead>
</table>

5. **Overriding criterion: Originality and authenticity**

If the paper is identified as not being original, and/or not done by the student, the instructor has the right to grade the paper as an F.

| Part I Overall: | /80 |
| Part II Overall: | /80 |
Chapter 4 – The Mind and Body Connection

**Syllabus**

**In-class activity**

Be a Great Photographer:
This activity is introduced during “creating a healing environment” lecture. The purpose of activity is to increase the awareness of the potential connection between stress management and students’ surrounding environment.

**Lecture**

**Group work**

Special Interest Project contains 3 parts - presentation, proposal and peer evaluation. This group work help student understand a technique in depth and develop a practical short presentation lesson to educate other students.

**Individual assignment (1)**

How Healing is IU Campus Environment?
This assignment is designed for students to use pictures taken during “creating healing environment” lecture to create photo essay.

**Individual assignment (2)**

Stress Relief Final Paper:
Students reflect their experiences of the in-class relaxation techniques/knowledge and identify most useful strategies to help them manage and reduce their stress.

**H180 Fall 2010**

49 54 55 58 60 61
SPH-H180 Stress Prevention and Management
Section 16541, Fall 2010, Geology (GY) 126
Tuesday & Thursday 4:00 - 6:30 pm

Instructor: Brian Chen
Department of Applied Health Science
Office: Poplars Building #613
Phone: 812-855-8751
E-mail: brichen@indiana.edu
Office Hours: Tuesdays 2:30-3:30, or by appointment


Course Description: This course is designed to help students learn about the body’s reaction to perceived stress, mental and physical factors related to stress, and effective coping techniques to help mitigate causes of stress. Students will learn about stress management techniques including time management, progressive muscular relaxation, and breathing techniques. To benefit most from class, students must practice stress reduction techniques outside of class.

Course Objective:
• Introduce students to:
  * concepts related to stress theory and research;
  * physical reactions to stress;
  * emotional, psychological and environmental factors related to stress; and
  * coping and relaxation techniques designed to reduce stress.
• With this knowledge, students will demonstrate their ability to:
  * recollect and interpret concepts related to stress;
  * identify and explain the sources of stresses in their own lives;
  * generate a plan to address sources of stress; and
  * practice techniques associated with coping and relaxation.

Course Requirements and Grading
The final course grade will be based on your performance on group work, individual assignments, exams and your class participation.
<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class activities</td>
<td>20</td>
</tr>
<tr>
<td>Individual Assignments</td>
<td>60</td>
</tr>
<tr>
<td>Group Work</td>
<td>60</td>
</tr>
<tr>
<td>Relaxation Exercises</td>
<td>60</td>
</tr>
<tr>
<td>Exam</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

**Grading Scheme**

- $95\% \leq A$
- $90\% \leq A-$
- $87\% \leq B+$
- $83\% \leq B$
- $80\% \leq B-$
- $77\% \leq C+$
- $73\% \leq C$
- $87\% \leq C-$
- $83\% \leq B$
- $80\% \leq B-$
- $67\% \leq D+$
- $63\% \leq D$

**Total:** 300

Do not ask to have your grade changed or rounded up. There must be a set cutoff somewhere, and this is where it will be.

1. **Exams:**
   Two closed-book, closed-notes exams will be given on the dates provided on the course schedule. A list of key concepts for review will be provided prior to the exam. The format of the exam will be: (1) multiple-choice and (2) fill in the blanks. Most of exam questions require you to memorize critical definitions and apply knowledge rather than reproduce facts only.

   **Make-up exam:**
   Make-up exams will only be provided for students with legitimate documentation under appropriate circumstances. Legitimate documentation will be kept for my records. Thus, please make copies for yourself if necessary.

2. **Individual Assignments:**
   Throughout the semester, individual assignments will be announced that reflect the current class material. These assignments may be journal entries, an assignment from the workbook, or an extra-curricular activity. An assignment may include more than one activity (e.g., journal pages and a workbook). The instructions will be posted on Oncourse under “Resources, Individual Assignments.”

3. **Group Work:**
   Group work allows you to work with and learn from your classmates. Students must work in groups of 4-5. Each group will be required to work on group projects. The group work may be group presentation, group paper, etc. The instructions will be posted on Oncourse under “Resources, Group Work”.
   - Pick your own groups.
   - Each group member must work together with an even workload.
   - Each group member must report noncooperation incidents.
   - The level of your involvement will affect your group work grades.
   - Student must attend the meetings, keep good communication with your group mates and complete assigned work.

4. **In-class Activities:**
   Throughout the semester, the students will participate in class activities. Students will be evaluated on their attendance and participation in the activities. Activities may be in the form of pop-quizzes, written responses to guest speakers, group activities, etc. The only
situations in which points may be made up for excused absences are for religious observa-
tion or participation in a University-Sanctioned event, otherwise:
• If you are not in class, you do not receive attendance points.
• If you have an extreme medical or personal situation you need to provide me with
  legitimate documentation.

5. Relaxation Exercises:
The relaxation exercises are conducted during class and can not be made up, unless
you have a valid and documented excuse due to illness, death in the family, or religious
holiday.

6. Extra Credit Opportunities:
From time to time, there might be extra credit possibilities. I will let you know about those
opportunities as they become available. Do not depend on extra credit to salvage your
grade in this class.

There are various opportunities to earn extra points:
During the lectures
• Answer specific questions and get the correct answers.
• Win the competition of in-class activities (e.g., puzzle, Jeopardy, etc.)

Assignments/Exam
• I will post instructions via Oncourse under “Resource, Extra Credit Opportuni-
ties” (e.g., research paper of a specific health topic).
• I may make bonus questions on the exams.

Course Policies

1. Communication:
The best way to contact me is through email or during office hours. I will respond to
e-mail within 48 hours, not including weekends and holidays. If you have an emergency,
please send me an Oncourse message if the situation allows you to do so. I welcome any
class related question. Please do not hesitate to communicate or share your thoughts with
me.

2. Academic Honesty:
Academic and personal misconduct by students in this class are defined and will be dealt
with according to the procedures in the IU Code of Student Rights, Responsibilities, and
Conduct (find the code at http://www.iu.edu/~code/code/index.shtml). Included among
dishonest behaviors in an academic setting are cheating (using or attempting to use un-
authorized assistance, materials, information, or study aids in an academic exercise), fab-
rication (falsifying or inventing information in an academic exercise), plagiarism (adopt-
ing or reproducing of ideas, words, or statements of another person without appropriate
acknowledgment), interference (stealing, changing, destroying, or impeding another
student’s work), and facilitating (intentionally or knowingly helping or attempting to help
another student commit an act of academic misconduct). Such misconduct,
regardless of degree, will not be tolerated and will be referred to the IU Division of Student Affairs for possible sanction. Students who conduct academic dishonesty may be given an F* course grade which can never be replaced on the transcript by retaking the course.

3. Classroom Etiquette:
Because of the distracting nature, use of electronic devices such as laptops and tablets is allowed for only course-related purposes. Audio and video recording is NOT allowed unless prior approval by the instructor. Please mute all electronic devices during class. Cell phone rings and inappropriate use of electronic devices during classes will result in poor grades of class participation and the student may be asked to leave the classroom.

Carrying on personal conversations during class sessions is disruptive to those around you and interferes with learning. Carrying on personal conversations or engaging in other behavior that interferes with student learning with result in very poor grades of class participation. Students who are chronically disruptive may receive poor class participation grades and be asked to drop the course.

4. Re-evaluation of Assignments and Exams:
If you have a concern about a grade of your exam or written assignments, you can submit a brief written request for a re-evaluation within 3 days of receiving a grade. Please clearly state why you believe a re-evaluation is warranted. However, change of grades is not guaranteed.

5. Special Needs:
If you are a student with a special need of any type, please discuss this with the instructor.

6. Religious Observation:
In accordance with the Office of the Vice Provost for Faculty and Academic Affairs guidelines, any student who wishes to receive an excused absence from class must submit a request form to the course instructor by the end of the first week of the semester. The form must be signed by the instructor, a copy retained by the instructor, and the original returned to the student. Information about the policy on religious observation can be found at: https://www.indiana.edu/~vpfaa/academicguide/index.php/Policy_H-10. You can download the request form at: http://www.indiana.edu/~vpfaa/welcome/forms.shtml.

7. Course Evaluation:
It is the policy of the School of Public Health to evaluate all courses taught through the School. Final student course evaluations will be conducted in a manner that maintains the integrity of the process and the anonymity of evaluators.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Homework Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/31</td>
<td>Introduction to Stress Management</td>
<td>Ch01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stress in Today's World</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Self Assessment</td>
<td>Ch01</td>
<td></td>
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<td></td>
<td></td>
<td>Ch02</td>
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<tr>
<td>9/07</td>
<td>The Science of Stress &amp; The Mind/Body Connection</td>
<td>Ch03</td>
<td>2.2 Stress Profile II Analysis of Results</td>
</tr>
<tr>
<td></td>
<td>*Form groups and choose topics for group project</td>
<td>Ch04</td>
<td></td>
</tr>
<tr>
<td>9/09</td>
<td>Managing Emotions</td>
<td>Ch08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction to Relaxation</td>
<td>Ch16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relaxation Exercise: Power Nap</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Bring your own comfort pillow if you want</td>
<td></td>
<td></td>
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<tr>
<td>9/14</td>
<td>Mindfulness</td>
<td>Ch07</td>
<td></td>
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<tr>
<td></td>
<td>Relaxation Exercise: Breath &amp; Meditation</td>
<td>Ch17 &amp; 21</td>
<td></td>
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<tr>
<td>9/16</td>
<td>Time and Life Management</td>
<td>Ch11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exam 1 Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/21</td>
<td>Exam 1 (4-5:30) - Chapters 1-4, 7-8, 16-17, 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/23</td>
<td>Communication and Relationships</td>
<td>Ch13</td>
<td></td>
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<tr>
<td></td>
<td>*Group meeting</td>
<td></td>
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<tr>
<td>9/28</td>
<td>Relaxation Exercise: Tai-Chi</td>
<td>Ch23</td>
<td></td>
</tr>
<tr>
<td>9/30</td>
<td>Creating a Healing Environment</td>
<td>Ch14</td>
<td></td>
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<tr>
<td></td>
<td>*Bring your digital camera (Group)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/05</td>
<td>Group Presentation</td>
<td>PART IV</td>
<td></td>
</tr>
<tr>
<td>10/07</td>
<td>Group Presentation</td>
<td>PART IV</td>
<td></td>
</tr>
<tr>
<td>10/12</td>
<td>The Importance of Values</td>
<td>Ch09</td>
<td>14.1 How Healing is Your Environment (IU)</td>
</tr>
<tr>
<td></td>
<td>Money Matters</td>
<td>Ch12</td>
<td></td>
</tr>
<tr>
<td>10/14</td>
<td>Healthy Lifestyles</td>
<td>Ch09</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relaxation Exercise: Progressive Relaxation</td>
<td>Ch12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Bring your music &amp; funny video/story</td>
<td>Ch15</td>
<td></td>
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<td></td>
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<td>Ch19</td>
<td></td>
</tr>
<tr>
<td>10/19</td>
<td>More Stress Reduction Strategies</td>
<td>Ch24</td>
<td>Stress Relief Final Paper</td>
</tr>
<tr>
<td></td>
<td>Relaxation Exercise: Humor, Laugh &amp; Music</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/21</td>
<td>Exam (4-5:30) - Chapters 9, 11-15, 23-24</td>
<td></td>
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</tbody>
</table>

Note: Schedule subject to change; announcements will be made in class. Each assignment is due at the beginning of class on the due date as indicated.
Be a Great Photographer!!

**Purpose:** The purpose of this activity is to increase your awareness of your environment

**Instruction:**
- Take as many pictures as possible
- Identify the location, color, light, smell, air, noise and temperature
- Relaxing or Stressful? Why?
- Short discussion from each group after coming back
  - What aspects of the environment do you find to be relaxing? Why?
  - What aspects of the environment do you find to be stressful? Why?
  - What are three things you would or could do to make IU more relaxing and healing?
Chap 04 The Mind and Body Connection

Discussion Questions

How do you think your thoughts can actually cause disease or cure disease? Explain your rationale. (Gp. 2)

Have you ever deliberately made yourself sick because you wanted to avoid a situation or event? Have you ever gotten sick at the end of a challenging semester? Explain how it makes sense that you were able to do this based on the information in this chapter. (Gp. 3)

Review Stress Response:

- Controlled by Sympathetic NS
- Fight-or-Flight
- Perceived threat
- Exhaustion
- Homeostasis
- Return to Homeostasis

Chronic Stress:

- Negative words said over & over again?
- Chronic Stress
- Fight-or-Flight
- Perceived threat
- Exhaustion
- Homeostasis
- Return to Homeostasis
Chap 04 The Mind and Body Connection (cont.)

Content
1. Review Stress Response
2. Role of Chronic Stress
3. Mind & Body Connection
4. Stress Reduction Exercise

Role of Chronic Stress in Disease
- Indirect effects: change in behavior
- Result from many repeated bouts of acute stress
- Result from life conditions (e.g., difficult job situation)
- Direct effects: physiological change in the body
- Result from body conditions (e.g., physical illness)

Harmful Health Effects of Stress
- Strain
  - Angry
  - Anxiety
  - Fatigue
  - Hard to sleep
- Pain
  - Headache
  - Muscle ache
  - Eye twitch
  - Stomach outbreak
- Immobility
- Disease
  - Sicker
  - Ulcer
  - Heart diseases
  - Diabetes

Cortisol and its effects
1. Stress hormone produced by adrenal glands
2. Chronically high levels promote inflammation
3. Increases blood pressure, blood sugar levels
4. Makes stored nutrients
5. Increases production of white blood cells
6. Inhibits ability to create new memories

In-class Exercise
Searching Evidences
1. Find 3 peer-reviewed journal articles that involve chronic stress-related physiological diseases that affect the physiological system
2. Turn in an APA style bibliography and upload full text of journal articles to "Assignment 2, L2B, In-class exercise"

** http://scholar.google.com/

Pitfalls
- Strain can alter blood sugar levels
- High blood pressure
- Kidney, eye, & other organs

Chen, Teaching Portfolio
Chap 04 The Mind and Body Connection (cont.)

**Content**
- Review Stress Response
- Role of Chronic Stress
- Mind & Body Connection
- Stress Reduction Exercise

**Mind and Body Connection**
- Improved health may result from:
  1. Awareness of thoughts and emotions that contribute to stress
  2. Conscious effort to control and change those factors

**Placebo & Nocebo Effects**

**Discussion Questions**
- Have you ever heard of someone who experienced the placebo or nocebo effect? Describe what happened. (Gp. 4)
- We must be careful to not immediately assign every health problem to someone's poor way of thinking. Discuss the negative aspects of this 'blaming the victim' approach to health. (Gp. 6)

**Relaxation Exercise: Diaphragmatic Breathing**
- Sit up straight with your head, neck, and shoulders relaxed.
- Raise one hand on your upper chest and the other just below your rib cage.
- Follow the breathing instructions in the video clip and practice.

Chen, Teaching Portfolio
H180: Stress Prevention and Management

Group Work: Special Interest Project

Introduction: Your group will complete a 15 minute presentation on a coping/relaxation technique from the following list. This should be an in-depth look at the therapy, and a chance to educate classmates on the therapy, its connection to stress management, and the proven effectiveness or potential of the therapy in regards to managing personal stress. Each group will present on a different topic, so we will have a sign-up day for each group to choose their topic and their presentation day.

Topics:

- Color Therapy
- Acupuncture
- Hydrotherapy
- Biofeedback

- Yoga
- Acupressure
- Autogenic
- Light Therapy

- Massage Therapy
- Imagery
- Volunteerism

Presentation: Requirements:

- Therapy description – including definitions, origin, necessary equipment, etc.
- Uses of Therapy – how it is used, populations who use it
- Scientific Research – often used to “prove” effectiveness; report how many studies have looked at this therapy, how many relate to stress, and the outcomes-this information should come from scientific journals-ask if you have questions about this.
- Future – outlook for this therapy, feasibility, challenges to increasing use, etc.
- Personal Experience and/or Commentary – an account of your experience with this therapy in it's relation to your opinions on the therapy with rationale
- Leading Activities – For example, your group can demonstrate exercise & interact with the audiences; create activities/games, lead interactive discussion, etc.
(\_/Max. Score): The points you earn will be based on quality of each grading item.

<table>
<thead>
<tr>
<th>Grading Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness of Content Requirements</td>
<td>/30</td>
</tr>
<tr>
<td>Clarity &amp; Flow</td>
<td>/15</td>
</tr>
<tr>
<td>Audience Engagement</td>
<td>/5</td>
</tr>
<tr>
<td>Time Control (About 15 min.)</td>
<td>/2</td>
</tr>
<tr>
<td>Multi-Media &amp; Visual Aid</td>
<td>/2</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>/2</td>
</tr>
<tr>
<td>Posture</td>
<td>/2</td>
</tr>
<tr>
<td>Enthusiasm</td>
<td>/2</td>
</tr>
</tbody>
</table>
H180: Stress Prevention and Management

Individual Assignment (#1): How Healing is IU Campus Environment?

Introduction: A photo essay is a way to communicate a message using images and words whereas the visual representation takes precedence over the text as a vehicle of communication. The message that we want to communicate is “How Healing is IU Campus Environment?” Using the pictures to create a photo essay that were taken at the 9/30 class as part of a larger exercise exploring healing environment around IU campus is. You must include pictures of both healing and stressful environments. You may use PowerPoint or Word to create your photo essay.

Photo Essay: Requirements:
- Cover page with the names of group members, date, course number, and title of your photo essay
- An abstract with 50-80 words
- Each group member must provide me at least 5 pictures with
  * A short title for each picture (e.g., “Playground,” “5-a-day”)
  * A 2-4 sentence caption: tell me the story & describe the environment including location, color, light, smell, air, noise & temperature
  * Using bullet points to summarize the question listed below
  * What aspects of the environment do you find to be relaxing/stressful? Why?
- Only use the photos taken by your (digital) camera. (no downloads & clip arts)

Due Date: Turn in your electronic copy to Oncourse “Forum, Photo Essay” by 10/12 at 4:00pm.
Indiana University
School of Public Health
Department of Applied Health Science

H180: Stress Prevention and Management

Individual Assignment (#2): Stress Relief Final Paper

Introduction: During the 8-week class you will learn about and experience a variety of activity designed specially to help you both reduce and prevent stress. You will do these both in the classroom and on your own. Example of these include the guided relaxation exercises along with several additional meditation, music, Tai-chi, etc. We will also work on some topics that will help you make better sense of the way your thoughts can lead to stress, and effective ways of changing them. A few examples of these include mindfulness, managing emotion, time and life management, etc.

At the end of all the lectures, you will write a paper that summarizes your experience of the things you did in class along with a brief summary of other aspects of this course.

Requirements: The body of the paper (Minimum of 3 pages) that includes a thorough discussion of your subjective experience of the class activities designed to help you manage and reduce your stress according to the following questions:

- Which class activities and topics did you find most useful for you towards managing your stress and gaining greater sense of inner peace? Why?
- Which class activities and topics did you find least useful for you towards managing your stress and gaining greater sense of inner peace? Why?
- Which of the relaxation techniques did you find most enjoyable and why?
- Which of the relaxation techniques did you find least enjoyable and why?
- Which areas of the class and relaxation techniques you plan to use in the future and why?
- Describe a few ways that you have changed as a result of the knowledge and experiences of this class since the beginning of the semester. Include ways that your stress symptoms have changed (headaches, sleeping habits, irritability, etc); ways you perceive things differently than before.
• If you were to take the class again, in what ways could the class be improved to enhance your experience of it?
• Did you get what you wanted out of the class?
• Finish by including any other final thoughts that would help me improve the class, or anything you feel you would like me to know about your experience of the class.

**Presentation:**

<table>
<thead>
<tr>
<th>Margins</th>
<th>Font</th>
<th>Number of pages</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”</td>
<td>12 Times New Roman</td>
<td>Min. 3 pages for main content</td>
<td>double</td>
</tr>
</tbody>
</table>

Others:
• Pagination
  » Number all pages except for the cover page; type your last name before the page number (e.g., Chen 1)
• Include a cover page with
  » Name: Your name
  » Title: Stress Relief Final Paper
  » Date: Month Date, Year
  » Course number: H180
  » Section number: xxxxx
• References
• Stapled

**Due Date:** Turn in your electronic copy to Oncourse “Drop Box” by 10/19 at 4:00pm.

**Grading Rubric:**

**Excellent (40):**
The responses are specific and comprehensive. There is complete, detailed, and clearly articulated information as to how the criteria are met. The ideas presented are innovative, well-conceived and thoroughly developed.
Good (30):
The responses are reasonably comprehensive and include sufficient
detail. The contents contain many of the characteristics of responses
that are very good even though it may require additional specificity,
support or elaboration in places.

Fair (20):
The responses are non-specific and lack focus and detail. The
responses address some of the selection criteria, but not all. Some
ideas presented are sound, but others are not responsive to the pur-
pose of the project. Additional information is needed in order to be
reasonably comprehensive and meet the criteria of a response that is
good.

Poor (0):
The responses do not meet many criteria; provides inaccurate infor-
mation or provides information that requires substantial clarification
as to how the criteria are met; lacks meaningful detail; demonstrates
lack of preparation; or otherwise raises substantial concerns about
the applicant's understanding of the issue in concept and/or ability to
meet the requirement in practice.
Statistical Package for the Social Science (SPSS)

This lecture shows detailed and clear instruction of SPSS environment/operations with on-site polls and feedback to ensure the effectiveness of learning.

Lecture

Homework & Feedback

I provided detailed electronic feedback for students to learn from their mistakes and what they have accomplished. I also used these feedback to further specific extra handouts/captivate animations to enhance learning.

Handouts/Activities

This handout demonstrates step-by-step Captivate slides and animation with self-controlled learning pace to facilitate understanding of complicated concepts.

Exam

Unsolicited Emails from students

Midterm exam

Chen, Teaching Portfolio
**Step 1. Draw a Tree Diagram from Given Table**

<table>
<thead>
<tr>
<th></th>
<th>Ovarian Cancer</th>
<th>free of Ovarian Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Negative</td>
<td>22</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

**Step 2. Fill “Total #” into Correct Box**

<table>
<thead>
<tr>
<th></th>
<th>Ovarian Cancer</th>
<th>free of Ovarian Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Negative</td>
<td>22</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

**Step 3. Calculate Probabilities**

<table>
<thead>
<tr>
<th></th>
<th>Ovarian Cancer</th>
<th>free of Ovarian Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Negative</td>
<td>22</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

**Conclusion:**

- **Sensitivity:** $\frac{28}{50} = 0.56$
- **False Negative:** $\frac{22}{50} = 0.44$
- **False Positive:** $\frac{23}{127} = 0.18$
- **Specificity:** $\frac{127}{127} = 1.0$
- **Total Positive:** Disease (Total #: 50)
- **Total Negative:** Disease (Total #: 22)
- **Total Positive:** Disease (Total #: 28)
- **Total Negative:** Disease (Total #: 23)
- **Total Positive:** Disease (Total #: 23)
- **Total Negative:** Disease (Total #: 127)

---

**Purpose:**

1. Provide timely feedback from students’ learning difficulties revealed in assignments
2. Decrease the pre-existing gap of math/statistics knowledge
3. Simplify complex computation into easier steps

**Full Multimedia Demo Site:**

http://pages.iu.edu/~brichen/
Lab 2: Statistical Package for the Social Sciences (SPSS)
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

- Creating variables
  - Go to Variable View
  - Enter variable information
  - Be sure to include Name, Type, Label, and Measure
- Input data
  - Go to Data View
  - Enter data in appropriate cell
  - Columns - represent a variable
  - Rows - represent data from one entity

Variable Types
- Numeric
  - Numbers (e.g., 7, 0, 120)
- String
  - Letters (e.g., ‘Andy’, ‘Idiot’)
- Currency
  - Currency (e.g., £20, $34, €56)
- Date
  - Dates (e.g., 21-06-1973, 06-21-73, 21-Jun-1973)
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

Click Analyze, Descriptive Statistics, Descriptives to get to the box below:

Live Poll Question #1

(A) It is longer and more detailed.
(B) It is abstract and unspecific.
(C) It refers to codes rather than variables.

Independent t-test (Prior to ANOVA)

- Used when there are two experimental conditions and different participants were assigned to each condition
- Data set-up:
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

**Independent t-test**
- Running the Analysis:
  - Click Analyze, Compare Means, Independent-Samples t-test to get to the box below.

**Dependent t-test**
- Used when there are two experimental conditions and the same participants took part in both conditions of the experiment
- Data set-up:

**Interpreting the Results**
- There was no significant difference between the means, t(11) = -1.68, p > .05.

**One-Way Independent ANOVA**
- Used when there is one IV and two or more treatment groups and subjects receive only one of the different treatment conditions
- Two methods for performing this analysis:
  - Point and click
  - Syntax
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

Lecture

- Data Set-up
  - Point and click:
  - Syntax:

- Running the Analysis (Point and click)
  - Click Analyze, Compare Means, One-Way ANOVA to get box below:

- Interpreting the Results
  - There was a significant effect of城市 on levels of libido, F(1,12)= 5.12, p<.05.

Taleq's post hoc analysis revealed that the high doze group had greater libido than the placebo group, p<.05.

NOTE: In theory you should perform post hoc tests. Conversely, if you do post hoc tests, there should be no need to do planned comparisons.

Levene's statistic is not significant indicating that the variances are not statistically significant.

This means we can trust the F-ratio in the multi-ANOVA table and can ignore the table on the left.

- Running the Analysis (Syntax)
  - First, name the sources of variation for an A5 design:
    - A
    - A/A
  - Syntax for analysis hypothetical with 3 treatment groups and 5 subjects per group:
    - manova score by A(1.3) S(1.5)
      /design = A vs 1, S w A = 1,
    - manova libido by dose (1.3) subject(1.5)
      /design = dose vs 1, subject w dose = 1.
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

- Running the Analysis
  - Click File, New Syntax to get window below.
  - Enter syntax, highlight selection, and press $\text{Run}$ to run analysis.
  - This should produce same ANOVA as the point and click method.

Live Poll Question #2

Levene's test can identify whether:

$\text{A}$. Data are normally-distributed.
$\text{B}$. The variances in different groups are equal.
$\text{C}$. The assumption of sphericity has been met.
$\text{D}$. Group means differ.

Topics

1. Quick Intro. to SPSS
2. One-Way ANOVA
3. Post Hoc Test
4. ?

Why Use Follow-Up Tests?

- The $F$-ratio tells us only that the experiment was successful
  - i.e., group means were different
- It does not tell us specifically which group means differ from which.
- We need additional tests to find out where the group differences lie.

How to Choose Follow-Up Tests?

- Multiple Comparisons ($t$-tests)
  - Type I error rate will be inflated
- Orthogonal Contrasts/Comparisons
  - Hypothesis driven
  - Planned a priori
- Post Hoc Tests
  - Not Planned (no hypothesis)
  - Compare all pairs of means
  - Trend Analysis

Why Not Use Lots $t$-Tests On Every Pair Of Groups?

- If we want to compare several means why don’t we compare pairs of means with $t$-tests?
  - Can’t look at several independent variables.
  - Inflates the Type I error rate.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Prob. of Type I error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>5% (0.05)</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>5% (0.05)</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>5% (0.05)</td>
</tr>
</tbody>
</table>

Overall Type I error: (5%) x (5%) x (5%) = 14.3% (inflated from 5% to 14.3%)
Lab 2: Statistical Package for the Social Sciences (SPSS) (cont.)

**Inflated Error Rates (Familywise Error Rates)**

\[ \text{Familywise Error} = 1 - (0.95)^n \quad (n \geq 3) \]

- \(1 - (0.95)^3 = 14.3\%\)
- \(1 - (0.95)^4 = 18.5\%\)
- \(1 - (0.95)^5 = 22.6\%\)
- \(1 - (0.95)^6 = 26.5\%\)

**Live Poll Question #3**

What are post hoc tests used for?

- (A) when there is a large Type I error
- (B) when there is no specific hypotheses before the experiment
- (C) when the familywise (FW) error is large
- (D) none of the above

**Topics**

1. Quick Intro. to SPSS
2. One-Way ANOVA
3. Post-hoc Test
4. Practice Time

**Practice Time (Omnibus ANOVA + Post-hoc Test)**

Data: Lab2_Data.sav

1. Click Analyze, Compare Means, One-Way ANOVA.
2. Click on the DV (levo) & click on the arrow near the “Dependent List” column. This variable will be selected in the “Dependent List”.
3. Click on the IV (dose) & click on the arrow near the “Factor” column. This variable will be selected in the “Dependent List”.
4. Click on Options tab, select 1st, 3rd, 4th & 5th item in “Statistics” column.
5. Check “Means plot” option
6. Select 1st item (i.e., Exclude cases analysis by analysis)
7. Click on Continue tab
8. Click on Post Hoc tab
9. Choose Tukey in “Equal Variances Assumed” column
10. Click on Continue tab
11. Click on OK tab
Q1. A study is run to estimate the mean total cholesterol level in children 2-6 years of age. A sample of 10 participants is selected and their total cholesterol levels are measured as follows.

<table>
<thead>
<tr>
<th>X</th>
<th>X^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>147</td>
<td>21,609</td>
</tr>
<tr>
<td>175</td>
<td>30,625</td>
</tr>
<tr>
<td>180</td>
<td>32,400</td>
</tr>
<tr>
<td>185</td>
<td>34,225</td>
</tr>
<tr>
<td>194</td>
<td>37,636</td>
</tr>
<tr>
<td>196</td>
<td>38,416</td>
</tr>
<tr>
<td>223</td>
<td>49,729</td>
</tr>
<tr>
<td>225</td>
<td>50,625</td>
</tr>
<tr>
<td>240</td>
<td>57,600</td>
</tr>
<tr>
<td>250</td>
<td>62,500</td>
</tr>
<tr>
<td>2015</td>
<td>415,365</td>
</tr>
</tbody>
</table>

a. Compute the sample mean.

$$\overline{X} = \sum X = 2,015 \div n = 10 = 201.5$$

b. Compute the sample standard deviation.

$$s = \sqrt{\frac{\sum X^2 - (\sum X)^2}{n-1}} = \sqrt{\frac{415,365 - (2,105)^2}{10}} = \sqrt{\frac{415,365 - 4,431,025}{10}} = \sqrt{27,737.5} = 55.5$$

c. Compute the median.

Median = \((194 + 196) / 2 = 195\)

d. Compute the first and third quartiles.

$$Q_1 = 177.5 \left(\frac{(175 + 180)}{2}\right)$$

$$Q_3 = 232.5 \left(\frac{(225 + 240)}{2}\right)$$

**Commented [BC1]:**

4060225

**Commented [BC2]:**

s = 32.22

**Commented [BC3]:**

Q1 = 180; Q3 = 225

---

**An ODD total number of data points:**

$\bullet$ Tricks for Q1 and Q3 when there is an ODD total number of data points:

$\bullet$ Let n be the total number of data points, where n is ODD.

$\bullet$ We know that the median is in location (n+1)/2.

$\bullet$ There are (n+1)/2 data points in the lower half.

$\bullet$ There are (n+1)/2 data points in the upper half.

**An EVEN total number of data points:**

$\bullet$ Tricks for Q1 and Q3 when there is an EVEN total number of data points:

$\bullet$ Let n be the total number of data points, where n is EVEN.

$\bullet$ We know that the median is the average of the two data points in location (n/2) and (n/2) + 1.

$\bullet$ There are n/2 data points in the lower half.

$\bullet$ There are n/2 data points in the upper half.
HW 2 Take-Home Assignment

e. Which measure, the mean or median, is a better measure of a typical value? Justify.

Outliers Check: IQR = 232.5 – 177.5 = 55

\[
\text{Lower Limit} = 177.5 - 1.5(55) = 177.5 - 82.5 = 95 \\
\text{Upper Limit} = 232.5 + 1.5(55) = 232.5 + 82.5 = 315
\]

According to the calculations computed for the outlier check and upper and lower limit check, there are no outliers present. Therefore, the mean would be considered the better measure of a typical value.

f. Which measure, the standard deviation or the interquartile range (i.e., Q3 – Q1), is a better measure of dispersion? Justify.

Based upon the calculation that there are no outliers, the standard deviation would be a better measure of dispersion.

Q2. The following box plot shows the distributions of Biostatics achievement scores in University A and University B

a. What is the median score in University A?

University A median score = 85

b. Are there any outliers in University A? Justify briefly.

\[
Q_1 = 80 \\
Q_3 = 90
\]

Outliers Check: IRQ = 90 – 80 = 10

\[
\text{Lower Limit} = 80 - 1.5(10) = 80 - 15 = 65 \\
\text{Upper Limit} = 90 - 1.5(10) = 90 - 15 = 75
\]

Based upon the calculations computed above, there are no outliers in University A.

c. What proportion of the University A have scores less than 80?

The proportion of the University A that has scores less than 80 is 0%.

d. What proportion of the University B have Score less than 80?

The proportion of the University B that has scores less than 80 is 95%.
HW 2 Take-Home Assignment

Q3. The following data were collected as part of a study of coffee consumption among graduate students. The following reflect cups per day consumed:

3 4 6 8 2 1 0

a. Compute the sample mean.

\[
\bar{X} = \frac{\sum X}{n} = \frac{24}{7} = 3.4
\]

b. Compute the sample standard deviation.

\[
s = \sqrt{\frac{\sum x^2 - (\sum X)^2}{n-1}} = \sqrt{\frac{130 - (24)^2}{7-1}} = \sqrt{\frac{130 - 576}{6}} = \sqrt{\frac{78}{6}} = \sqrt{13} \approx 3.6
\]

c. Compute the median.

Median = 3

d. Compute the first and third quartiles.

\[Q_1 = 1 \quad Q_3 = 6\]

e. Which measure, the mean or median, is a better measure of a typical value? Justify.

Outliers Check: IQR = 6

Lower Limit: 1 - 1.5 (5) = 1 - 7.5 = - 6.5

Upper Limit: 6 + 1.5 (5) = 6 + 7.5 = 13.5

Good Job!
HW 2 Take-Home Assignment

According to the calculations computed, there are no outliers. Therefore, the mean is a better measure of a typical value.

f. Which measure, the standard deviation or the interquartile range, is a better measure of dispersion? Justify.

Based upon the calculations computed that there are no outliers present; the standard deviation (s = 2.8) would be a better measure of dispersion.
Exam 1

(Paper)

Q1:
(a) Use the data below to perform the one-way independent ANOVA (single-factor between subjects design) with the Post Hoc Analysis (Tukey’s HSD Test). Provide a concise interpretation based on the ANOVA table and Post-hoc tests (IV=Therapy Method DV=response score).
(b) Calculate the magnitude of the effect using $\eta^2$ & $\omega^2$ based on the above ANOVA table

<table>
<thead>
<tr>
<th></th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Q2:
Given the following hypothetical data from a single-factor between-subject design, perform the planned comparisons by hand listed below. In addition, check orthogonality between the pair comparison. The independent variable is treatment and the dependent variable is response. Give brief explanation of the results.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>19</td>
<td>1</td>
<td>12</td>
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</tbody>
</table>

Coefficients for the comparisons:
Comp 1: 0, +1, -1
Comp 2: +1, -1/2, -1/2
Exam 1 (cont.)

Take-Home (SPSS)

Q1:
Use following information to perform One Way ANOVA and Post-Hoc Test (Tukey HSD Test & Scheffe) with IBM SPSS. Check the assumption of homogeneity of variance as well. (Note: IV=statistics teaching method, DV=score)

<table>
<thead>
<tr>
<th>Group</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
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<tr>
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<td>40</td>
<td>65</td>
<td>93</td>
<td>62</td>
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</tbody>
</table>

Q2:
Given the data in Q1, use the IBM SPSS to
(a) Perform planned comparison based on the following contrasts:
   - Comp 1 = 1, 0, 0, -1
   - Comp 2 = 0, 1, -1, 0
   - Comp 3 = 1, -1, -1, 1
(b) Do trend analysis (linear)
Exam 1 (cont.)

(Multiple Choice)
Q1: What are the experimental threats to avoid?
(a) Poor external validity
(b) Poor internal validity
(c) Methods that do not ensure correct Type I Error
(d) All of the above

Q2: External validity is important because it makes us think carefully whether the measures we use really stand in well for the concepts that label them
(a) True
(b) False

Q3: Construct validity relates to the breadth of the population we have sampled and how well we can justify extending our results to an even broader population.
(a) True
(b) False

Q4: The F-distribution is a non-negative distribution in the sense that F values, which are squares, can never be negative numbers.
(a) True
(b) False

Q5: In addition to sample size, the main (partially) controllable experimental characteristic that affects power is variability. If you can reduce variability, you can increase power. One reasonable categorization is:
(a) Measurement
(b) Environmental
(c) Treatment application
(d) Subject-to-subject
(e) All of the above
Selected unsolicited Emails/Letters from Students

“Hi, Brian, Thank you, I appreciate that you have taken time to send this out. I have also come to appreciate all the hard work you put into sending out, grading, and keeping track of our assignments earlier in the semester. If you intend to teach after you earn your degree, I think you will do well. Either way, best wishes. Thanks again”

“Brian, I appreciate all the help you have offered me. Hopefully your handouts will give me a little more confidence about what is going on in the current chapters. I deeply appreciate all your help this semester, good luck with your future endeavors.”

“Hi, Brian, Thank you so much for the tree diagram animation, it helped tremendously. I’m not sure why I was making that so difficult, but after re-opening my homework I can see where I went wrong.”

“Bian, I appreciate all the help you have offered me. Hopefully your handouts will give me a little more confidence about what is going on in the current chapters. I deeply appreciate all your help this semester, good luck with your future endeavors.”

“Brian, The tips you gave on Wednesday really helped a lot. May I have a copy of whatever you feel comfortable sharing? The tips about 1st and 3rd quartile were especially helpful.”

“Thank you for getting the updated information to us and clarifying some confusing points!”

“Hi, Brian, Thank you so much for the tree diagram animation, it helped tremendously. I’m not sure why I was making that so difficult, but after re-opening my homework I can see where I went wrong.”

“Brian, I was wondering if you could send me the powerpoint you presented in lecture on Wednesday? I think it will help me understand better, and better prepare me for the exam in a few weeks. Thank you.”

“Brian, I appreciate all the help you have offered me. Hopefully your handouts will give me a little more confidence about what is going on in the current chapters. I deeply appreciate all your help this semester, good luck with your future endeavors.”

“Brian, Thank you for sending the supplemental handouts. I appreciate it! Enjoy your break!”
During my teaching career at Indiana University, students have assessed my instruction as outstanding. As evident in the course ratings in this section, students appreciate my innovation and organization I display for teaching generally. Students also consistently find me to be knowledgeable and enthusiastic about the course content. Significantly, students are unfailingly appraise my treatment of students as respectful, considerate, and open-minded. Moreover, student ratings demonstrate that they feel valued in my classes and feel comfortable to ask questions.
SPH-H 263 Personal Health

Demonstration of improvement since the first class in 2009. Almost all categories are averaging above 3.6/4.0 afterwards.

SPH-H 180 Stress Prevention and Management

Demonstration of improvement since the first class in 2010.

IU Multi-Op Evaluation

- Overall
- Enthusiasm and Intellectual Stimulation
- Rapport and Respect
- Reading and Assignments
- Evaluation and Feedback
- Organization and Clarity of Presentation
- Knowledgeability
- Objectives and Content Relevance
- Difficulty
- Knowledge and Skills
Selected comments from official end-of-semester evaluations

### Enthusiasm and vitality:

- His enthusiasm and fairness in the class. I also like his style of teaching. (H180, Fall 2010)
- I liked how enthusiastic and helpful my instructor was. (H180, Fall 2010)
- Brian Chen was very enthusiastic about the course. (H263, Fall 2009)
- Brian Chen was very prepared and enjoyed instructing. Was very enthusiastic about teaching. (H263, Spring 2012 Second 8-Week)
- Enthusiasm. Brian Chen is a boss! Best class ever! (H263, Spring 2012 Second 8-Week)
- The instructor was very active in class discussion. (H180, Fall 2010)

### Rapport, respect and caring:

- The instructor was flexible to student’s needs, he took suggestions on class methods (H180, Fall 2010)
- Good teacher, very communicable (H180, Summer 2011)
- The instructor was open and easy to work/talk to about class problems. (H180, Summer 2011)
- Mr. Chen really cares about his students I really appreciated all the time and effort he put into this course. (H263, Spring 2011)
- Instructor was always available and very accommodating of students. Moreover, he remembered all students’ names. Awesome!! (H263, Spring 2012 Second 8-Week)

### Organization and clarity:

- Teacher was always happy and excited to teach. He explained assignment and expectations clearly and is a very fair grader. (H180, Fall 2010)
- This course has been by far the most interactive and well-planned classes I have taken as a student. I would recommend this class and professor to any student. Mr. Chen presented a clear knowledge of the subject, and was extremely enthusiastic. (H263, Spring 2011)

### Knowledge of content area:

- He is knowledgeable on course topics and makes everyone feel free to ask questions, and you can tell he cares and wants us to do well in the class. (H263, Fall 2009)
- I liked how the material covered in this course explained matter I can related to. I liked how the instructor was personable and could also relate. (H180, Fall 2010)
- Knowledgeable on course topics. (H263, Spring 2012 Second 8-Week)
Innovation, engagement and creativity:

- I really enjoyed Brian as an instructor, he made this course fun and interactive, he was very engaging and helpful. I would recommend people to take his course. (H180, Fall 2010)
- I really enjoyed Professor Chen’s interactive teaching style. I learned a lot from his games and powerpoints, and I gained insight from activities like in class relaxation, breathing and Tai Chi. (H180, Fall 2010)
- Exams were challenging, but I got tremendous help from the mind map and concept map taught by Professor Chen. These methods were very helpful. They also stimulated my thinking and I highly recommend Professor Chen to my friends since the active and interactive teaching style made this course extremely valuable. (H263, Spring 2011)
- Brian is one of the most interactive professors I have had at IU. He finds a way to make the material interesting and fun. He is awesome! (H263, Spring 2012 First 8-Week)
- The instructor did a very good job planning activities that were interesting and fun and got the whole class involved. He lectured a good amount of time too, that wasn’t too much. (H180, Fall 2010)
- I liked all the in class activities the most about this course. It made learning the material more fun. (H263, Spring 2012 First 8-Week)
- Brian is so understanding, helpful, and innovative, so I have nothing bad to say about him. (H263, Spring 2012 First 8-Week)

Note. Please see the official quantitative and qualitative evaluations in Appendix A.
Reflections on evaluations

Continued throughout all courses based on feedback:

- Maintain openness for any formal or informal feedback
- Intensive use of multimedia and interactive activities
- Invited guest speakers and panels for relevant topics

Changes made over time:

Activities
- Added more hand-on class activities
- Required thinking and worked outside of class
- Provided online self-paced learning activities

Assignments
- Changed to a longer assignment over the semester
- Applied knowledge and skills learned in class to their real life

Evaluation
- Conducted a midterm evaluation to make immediate adjustments

Grading
- Increased participation points to 20% of class grade.
- Switched to open book and online final exam with study guides

Textbook
- Offered choice regarding readings
- Assigned mandatory and optional readings
- Assigned additional book to stimulate thinking

Feedback suggesting change out of my control:

- Textbook was selected by the department
- Time slot of course selected by students (other sections exist)
- School requires attendance be taken
### H263 Spring, 2011

<table>
<thead>
<tr>
<th></th>
<th>G=Good</th>
<th>I=Improvement Desired</th>
<th>N=Not Observed</th>
<th>U=Unsatisfactory</th>
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<tbody>
<tr>
<td>A. Teaching Techniques</td>
<td>20/22</td>
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<td>2/22</td>
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<tr>
<td>B. Effective Planning</td>
<td>6/8</td>
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<td>2/8</td>
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<tr>
<td>C. Student/Teacher Relationships</td>
<td>13/15</td>
<td></td>
<td>3/15</td>
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<tr>
<td>D. Commendable Features</td>
<td></td>
<td>Great knowledge of student names!</td>
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<td></td>
<td></td>
<td>Great Powerpoint slide show.</td>
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<td>Great medias &amp; graphics.</td>
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<td></td>
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<td>I really like the activity.</td>
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Evaluator: Kathy Finley

### H263 Spring, 2012

<table>
<thead>
<tr>
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<tr>
<td>D. Commendable Features</td>
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Evaluator: Kathy Finley

Note. Please see the evaluations from the department in Appendix B.
Future Courses

The areas of courses I can teach including statistics, epidemiology and research methods, etc.
Courses I can teach

General topic areas:
- Intermediated and advanced statistics
- Fundamentals of Epidemiology
- Introduction to public health policy
- Research and evaluation method in public health
- Geographic Information Systems (GIS) in public health
- Community health
- Global health

Sample course descriptions:

**HMP615 Introduction to Public Health Policy - University of Michigan.** Describes the nature of public policy interventions within the various domains of public health, the theoretical motivations for undertaking them, the influence of the political, bureaucratic, and social environmental in which policy decisions are made, the consequences of such decisions, and the key dimensions of analysis of the effects of public health policies.

**HB695 GIS for Public Health - University of Alabama at Birmingham.** This course will cover the theory and application of geographic information systems (GIS) for public health. Students will develop basic GIS skills and learn how to use GIS to describe and solve public health challenges.

**E517 Fundamentals of Epidemiology - Indiana University-Purdue University Indianapolis.** This course will introduce students to basic epidemiologic concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will gain an understanding of the role of epidemiology in developing prevention strategies and policy. Among the topics to be covered are measures of mortality and morbidity, design and analysis of observational studies, community health assessment and program evaluation.
Course Title | Evaluation Research in Public Health
--- | ---
**Course Description** | While public health interventions are expected to have demonstrable effects, their effectiveness and costs are of all associated stakeholders’ concern. This course will provide students with knowledge and skills of evaluation research in public health program, policies and interventions.

This course will cover the topics of basic concepts in evaluation research such as research designs, conceptual framework, measurement, data collection and management, analytical evaluation methods, manuscript writing and publishing. Evaluation techniques will also be covered in this course; these techniques include: 1) quasi-experimental research designs, 2) use of sophisticated statistical tools (such as multivariate regression models, instrumental variable, longitudinal data analysis, difference-in-difference, etc.) to examine health policies, and 3) health outcome evaluation.

This course will also focus on practical perspectives of evaluation research. The instructor will demonstrate how to use the statistical software SPSS or Stata 13 to carry out statistical analyses for evaluation research covered in this course.

The instructor will work with every student on a final term project evaluating a real-life public health intervention throughout the semester. The final product of this course will be a publishable manuscript.

**Course Competencies**
1. Design and conduct rigorous research in health behavior following standards and practices acceptable in field.
2. Select, apply, and interpret analytic methods appropriate in health behavior research.
3. Effectively communicate and disseminate research findings through refereed publications and scientific presentations.
4. Use theories and conceptual frameworks to inform research.

**Course Requirement**
Each student will conduct a term project evaluating a real-life public health program. The instructor will work with each student throughout the semester to carry out the final product.
## Course Title

Introduction to Public Health Statistics

### Course Description

An applied approach to the collection, organization, analyses and interpretation of data pertinent to public health and vital statistics is outlined. The application of statistical and biostatistical methods to public health is explained.

This course will cover the following topics:

- Basic Study Designs
- Summarizing Data Collection in the Sample
- The Role of Probability
- Quantifying the Extent of Disease
- Hypothesis Testing Procedures
- Parameters Estimates and Confidence Interval Estimates
- Power and Sample Size Determination
- Basic Multivariable Methods

### Course Competencies

- Describe the roles biostatistics serves in the discipline of public health.
- Distinguish among the different measurement scales and select statistical methods to be used based on these distinctions.
- Apply descriptive and inferential methodologies according to the type of study data and/or study design for answering a particular research question.
- Apply basic informatics techniques with vital statistics and public health records and in public health research and evaluation.
- Interpret results of statistical analyses for/in public health studies.

### Course Requirement

Students will collect their own data and put together a portfolio applying each lesson throughout the course. The instructor will work with each group throughout the semester to carry out the final portfolio.
Teaching Development

Continuous training on pedagogical methods and technology to provide state-of-the-art teaching skills.
I kept attending courses and workshops to polish my teaching and pedagogical techniques.

Course: Instructional ideas and technology tools for online success (5 weeks)
Indiana University’s 17th Annual Preparing Future Faculty Conference

Workshop: Teaching for Engagement-Facilitating active learning in your classroom

Workshop: Strategies to Motivate Students

2009

2010

Workshop: Creating Online Content and Activities
Workshop: Curriculum Development via Backward Design
Workshop: Teaching Portfolios: Documenting and Reflecting on Teaching Practices

2011

2012

Course: Instructional Design Essentials: Models of ID
Certificate of Completion, Course: Captivate Advanced Training

2013

2014

Certificate of Completion, Course: Instructional Design Essentials: Needs Analysis
Official Quantitative and Qualitative Evaluations
### Multi-Op Course and Instructor Evaluation

**IU Bloomington Evaluation Services and Testing (BEST)**

Franklin Hall 014  
Main Office: 855-1595  
Scoring Room: 855-3357

<table>
<thead>
<tr>
<th>Course:</th>
<th>M263</th>
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<tbody>
<tr>
<td>Section:</td>
<td>1676</td>
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</tbody>
</table>

**Number of students responding:** 22  
**Distribution of expected grades:**  
- A: 18  
- B: 0  
- C: 0  
- D: 0  
- F: 0  
- No response: 4

**Section distribution by class:**  
- Freshmen: 3  
- Sophomores: 6  
- Juniors: 5  
- Seniors: 7  
- Graduates: 0  
- Other: 0  
- No response: 1  
- In this course required:  
  - Yes: 6  
  - No: 9  
  - No response: 7

**Run date:** Fri May 20 15:34:47 2011

**Item No. (Catalog No.)**  
**Item**  
**Pct marking each response**  
| 4 | 3 | 2 | 1 | 0 | N | Mean | N/A | Group | Univ |

#### GLOBAL ITEMS
1. (1) Overall, I would rate the quality of this course as outstanding  
   - Percentage: 73  
   - Group: N/A  
   - University: 91.3
2. (2) Overall, I would rate this instructor as outstanding  
   - Percentage: 68  
   - Group: N/A  
   - University: 82.8

**Category Averages:**  
- Overall: 70  
- Quality: 29  
- Instructor: 0  
- University: 3.70

#### INSTRUCTOR CHARACTERISTICS
- **Organization and Clarity of Presentation**  
  3. (4) My instructor organized this course well  
    - Percentage: 95  
    - Group: N/A  
    - University: 100.0
4. (5) My instructor is well prepared for class meetings  
    - Percentage: 86  
    - Group: N/A  
    - University: 95.1
5. (6) My instructor explains the material clearly  
    - Percentage: 81  
    - Group: N/A  
    - University: 93.3
6. (10) My instructor uses teaching methods well suited to the course  
    - Percentage: 86  
    - Group: N/A  
    - University: 96.4

**Category Averages:**  
- Organization: 87  
- Clarity: 13  
- Preparations: 0  
- University: 3.87

#### INSTRUCTOR CHARACTERISTICS
- **Enthusiasm and Intellectual Stimulation**  
  7. (17) My instructor is enthusiastic about teaching this course  
    - Percentage: 91  
    - Group: N/A  
    - University: 90.3
8. (18) My instructor makes the subject interesting  
    - Percentage: 82  
    - Group: N/A  
    - University: 90.7
9. (21) My instructor stimulates my thinking  
    - Percentage: 68  
    - Group: N/A  
    - University: 87.8

**Category Averages:**  
- Enthusiasm: 80  
- Intellectual: 19  
- Stimulation: 0  
- University: 3.80

#### INSTRUCTOR CHARACTERISTICS
- **Knowledgability**  
  10. (25) My instructor is knowledgeable on course topics  
    - Percentage: 82  
    - Group: N/A  
    - University: 76.3
### Instructor: CHEN  
### Course: H263  
### Section: 1676  
### Date: Fri May 20 15:34:47 2011

<table>
<thead>
<tr>
<th>Category Averages:</th>
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<tr>
<td>- Rapport and Respect</td>
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<tr>
<td>11 (28) My instructor treats students with respect</td>
<td>91</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>3.91</td>
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<tr>
<td>12 (31) My instructor is regularly available for consultation</td>
<td>86</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>3.86</td>
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<tr>
<td>13 (32) My instructor is fair and impartial when dealing with students</td>
<td>82</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>3.82</td>
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<tr>
<td>14 (34) My instructor recognizes when students fail to comprehend</td>
<td>73</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>3.73</td>
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<tr>
<td>15 (36) My instructor makes me feel free to ask questions in class</td>
<td>86</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>3.86</td>
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<tr>
<td><strong>COURSE ELEMENTS</strong></td>
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<tr>
<td>- Objectives and Content Relevance</td>
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<tr>
<td>16 (54) Announced course objectives agree with what is taught</td>
<td>68</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>3.68</td>
</tr>
<tr>
<td>17 (55) I know what is expected of me in this course</td>
<td>64</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>3.64</td>
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<tr>
<td><strong>COURSE ELEMENTS</strong></td>
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<tr>
<td>- Reading and Assignment</td>
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<td>18 (58) Overall, I would rate the textbook/reading as excellent</td>
<td>68</td>
<td>27</td>
<td>5</td>
<td>0</td>
<td>3.64</td>
</tr>
<tr>
<td>19 (60) Course assignments help in learning the subject matter</td>
<td>64</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>3.64</td>
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<tr>
<td>20 (63) Complexity and length of course assignments are reasonable</td>
<td>77</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>3.77</td>
</tr>
<tr>
<td><strong>COURSE ELEMENTS</strong></td>
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<tr>
<td>- Difficulty</td>
<td></td>
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<tr>
<td>21 (75) The level of difficulty of this course is appropriate for me</td>
<td>68</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>3.68</td>
</tr>
<tr>
<td><strong>COURSE ELEMENTS</strong></td>
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<tr>
<td>- Evaluation and Feedback</td>
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<tr>
<td>22 (79) The grading procedures for the course are fair</td>
<td>86</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>3.86</td>
</tr>
<tr>
<td>23 (84) The exams cover the most important aspects of the course</td>
<td>86</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>3.86</td>
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<tr>
<td>24 (85) Exams in this course are fair</td>
<td>68</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>3.68</td>
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<tr>
<td>25 (88) Feedback on exams indicated clearly my standing in the course</td>
<td>86</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>3.86</td>
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<tr>
<td><strong>STUDENT DEVELOPMENT</strong></td>
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<tr>
<td>- Knowledge and Skills</td>
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</tr>
<tr>
<td>26 (107) I learned a lot in this course</td>
<td>68</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>3.68</td>
</tr>
<tr>
<td>27 (109) I developed the ability to solve actual problems in this field</td>
<td>73</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>3.73</td>
</tr>
<tr>
<td><strong>INSTRUCTOR-WRITTEN AND OPEN-ENDED ITEMS</strong></td>
<td></td>
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<tr>
<td>- Open-Ended Items</td>
<td></td>
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</tr>
</tbody>
</table>
28. What did you like most about the course and/or the instructor?

- This course has been by far the most interactive and well planned classes I have taken as a student. I would recommend this class and professor to any student. Mr. Chen presented a clear knowledge of the subject, and was extremely enthusiastic.
- I like this course and this teacher he is a very nice people. I learn more about things in this course. In the class the activity is very interesting.
- He is a wonderful teacher! Very nice!
- Mr. Chen really put effort and fun into this course. It was fun to come to everyday.
- How enthusiastic he is and his powerpoints.
- Engaging activities. Helpful professor.
- Mr. Chen really cares about his students I really appreciated all the time and effort he put into this course.
- I liked the variety of guest speakers. Also, Mr. Chen was always willing to help.
- Nice guy, awesome powerpoint slides.
- Exams were challenging, but I got tremendous help form the mind map and concept map taught by professor Chen. These methods were very helpful. They also stimulated my thinking and I highly recommend Professor Chen to my friends since the active and interactive teaching style made this course extremely valuable.
- The course was entertaining.
- Everything.

29. What did you like least about the course and/or the instructor?

- It was too short.
- Long class period.
- The mind maps confused me sometimes.
- Nothing.
- None.
- The length of the classes.
- Nothing.

30. What could the instructor do to improve the course or his/her teaching effectiveness?

- Play Adele at the start of class! We love <r. Chen!! Susan Werbe.
- Nothing!
• You made the class so entertaining. Kelly Shank.
• Create a more specific study guide for exams I.
• Keep up the good work.
• Powerpoints slides were slick with lots of special effects, which facilitated the learning and stimulated my thinking. Professor Chen, you rock.
• Loved the course.
Evaluations from the Department
Associate Instructor Teaching Evaluation

Associate Instructor  Brian Chen  Course HPER- 4263  No. of Students  30

Length of Visit  75min  Date of Visit

Mark each item according to the following scale:

G=Good  I=Improvement Desired  N=Not Observed  U=Unsatisfactory

A. Teaching Techniques

☐ Demonstrates sufficient mastery of content.
☐ Provides for student participation.
☐ Encourages and acknowledges individual students' accomplishments and appropriate behavior.
☐ Uses logical, purposeful and thought-provoking questions.
☐ Provides interesting and adequate reinforcement.
☑ Varies procedures in working with pupils of varying abilities.
☐ Presents reading, writing, speaking, and listening strategies using concepts and language which students understand.
☐ Provides relevant examples and demonstrations to illustrate concepts and skills.
☐ Incorporates higher level thinking skills.
☐ Demonstrates professionalism
☐ Demonstrates enthusiasm for topic
☐ Proper enunciation
☐ Customization of course to skill level / interest
☐ Reasonable Speed
☐ Explanation of new material  used videos

[1]
Department of Applied Health Science

A. Chalk Board/Marker Board Skills

☐ Demonstrations / Visual Aids / Handouts

☐ Use of Technology

☐ Use of clear examples

☐ Comprehension check

☑ Synthesis of ideas

☐ Provides motivation

B. Effective Planning

☑ Displays evidence of preparation.

☐ Directions to students are clearly thought out and well stated.

☑ Materials for class are organized and available.

☑ Provides enrichment and/or remediation where needed.

☑ Begins lesson or instructional activity with a review of previous materials as appropriate

☑ States Objectives / Goals at beginning of class

☑ Summarizes the main point(s) of the instructional activity.

☑ Punctuality of both start and end of class

C. Student/Teacher Relationships

☐ Maintains student interest and attention.

☐ Works constructively with individual or group.

☐ Manages routine so as to avoid confusion.

☐ Exhibits poise, voice control, and tact.

[2]
Graciously accepts less than "right" response with slow students.

Uses positive statements to students.

Makes supportive statements to students.

Maintains a friendly and respectful teacher-student relationship.

Encouragement of Discussion

Control of Discussion

Listening to Questions

Answering Questions

Willingness to Say "I don't know but I'll find out"

Allowing / Encouraging Peer Explanations

Willingness to accept alternate explanations

Willingness to accept criticism

D. Commendable Features

Great PowerPoint show - great videos & graphics.

E. Suggestions for Improvement

Associate Instructor  Date  4/27/2011

Evaluator  Date  4/27/11
Department of Applied Health Science

**Associate Instructor Teaching Evaluation**

Associate Instructor: Brian Chen  
Course: HPER-4263  
No. of Students:  
Length of Visit:  
Date of Visit: 8/21/12

Mark each item according to the following scale:

- **G** = Good  
- **I** = Improvement Desired  
- **N** = Not Observed  
- **U** = Unsatisfactory

### A. Teaching Techniques

- [ ] Demonstrates sufficient mastery of content.
- [ ] Provides for student participation.
- [ ] Encourages and acknowledges individual students’ accomplishments and appropriate behavior.
- [ ] Uses logical, purposeful and thought-provoking questions.
- [ ] Provides interesting and adequate reinforcement.
- [ ] Varies procedures in working with pupils of varying abilities.
- [ ] Presents reading, writing, speaking, and listening strategies using concepts and language which students understand.
- [ ] Provides relevant examples and demonstrations to illustrate concepts and skills.
- [ ] Incorporates higher level thinking skills.
- [ ] Demonstrates professionalism.
- [ ] Demonstrates enthusiasm for topic.
- [ ] Proper enunciation.
- [ ] Customization of course to skill level / interest.
- [ ] Reasonable Speed.
- [ ] Explanation of new material.
Department of Applied Health Science

A. Chalk Board/Marker Board Skills
   - Demonstrations / Visual Aids / Handouts
   - Use of Technology
   - Use of clear examples
   - Comprehension check
   - Synthesis of ideas
   - Provides motivation

B. Effective Planning
   - Displays evidence of preparation.
   - Directions to students are clearly thought out and well stated.
   - Materials for class are organized and available.
   - Provides enrichment and/or remediation where needed.
   - Begins lesson or instructional activity with a review of previous materials as appropriate
   - States Objectives / Goals at beginning of class
   - Summarizes the main point(s) of the instructional activity.
   - Punctuality of both start and end of class

C. Student/Teacher Relationships
   - Maintains student interest and attention.
   - Works constructively with individual or group.
   - Manages routine so as to avoid confusion.
   - Exhibits poise, voice control, and tact.

[2]
Department of Applied Health Science

- Graciously accepts less than "right" response with slow students.
- Uses positive statements to students.
- Makes supportive statements to students.
- Maintains a friendly and respectful teacher-student relationship.
- Encouragement of Discussion

- Control of Discussion
- Listening to Questions
- Answering Questions
- Willingness to Say "I don't know but I'll find out"
- Allowing / Encouraging Peer Explanations
- Willingness to accept alternate explanations
- Willingness to accept criticism

D. Commendable Features

E. Suggestions for Improvement

Associate Instructor ___________________________ Date __________
Evaluator _______________________________ Date __________

[3]
Quantitative Evaluations (Summary Table)
<table>
<thead>
<tr>
<th>Item #</th>
<th>Evaluation Items</th>
<th>H180, Fall 2010</th>
<th>H180, Summer 2011</th>
<th>H263, Fall 2009</th>
<th>H263, Spring 2011</th>
<th>H263, Spring 2012 First</th>
<th>H263, Spring 2012 Second</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall, I would rate the quality of this course as outstanding.</td>
<td>3.29</td>
<td>3.41</td>
<td>3.29</td>
<td>3.73</td>
<td>3.56</td>
<td>3.64</td>
</tr>
<tr>
<td>2</td>
<td>Overall, I would rate this instructor as outstanding.</td>
<td>3.43</td>
<td>3.41</td>
<td>3.42</td>
<td>3.68</td>
<td>3.72</td>
<td>3.64</td>
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<td></td>
<td><strong>Category Averages</strong></td>
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<td></td>
<td><strong>GLOBAL ITEMS</strong></td>
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<td>3</td>
<td>My instructor organized this course well.</td>
<td>3.46</td>
<td>3.53</td>
<td>3.61</td>
<td>3.95</td>
<td>3.72</td>
<td>3.68</td>
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<tr>
<td>4</td>
<td>My instructor is well prepared for class meetings.</td>
<td>3.57</td>
<td>3.59</td>
<td>3.66</td>
<td>3.86</td>
<td>3.89</td>
<td>3.74</td>
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<tr>
<td>5</td>
<td>My instructor explains the material clearly.</td>
<td>3.31</td>
<td>3.53</td>
<td>3.34</td>
<td>3.81</td>
<td>3.72</td>
<td>3.76</td>
</tr>
<tr>
<td>6</td>
<td>My instructor uses teaching methods well suited to the course.</td>
<td>3.51</td>
<td>3.71</td>
<td>3.42</td>
<td>3.86</td>
<td>3.83</td>
<td>3.67</td>
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<tr>
<td>7</td>
<td>My instructor is enthusiastic about teaching this course.</td>
<td>3.69</td>
<td>3.88</td>
<td>3.76</td>
<td>3.91</td>
<td>3.94</td>
<td>3.79</td>
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<td>8</td>
<td>My instructor makes the subject interesting.</td>
<td>3.29</td>
<td>3.65</td>
<td>3.39</td>
<td>3.82</td>
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<tr>
<td>9</td>
<td>My instructor stimulates my thinking.</td>
<td>3.11</td>
<td>3.59</td>
<td>3.16</td>
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<td>3.69</td>
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<tr>
<td>10</td>
<td>My instructor is knowledgeable on course topics.</td>
<td>3.51</td>
<td>3.71</td>
<td>3.55</td>
<td>3.82</td>
<td>3.78</td>
<td>3.71</td>
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<td><strong>3.71</strong></td>
<td><strong>3.55</strong></td>
<td><strong>3.82</strong></td>
<td><strong>3.78</strong></td>
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<tr>
<td>11</td>
<td>My instructor treats students with respect.</td>
<td>3.77</td>
<td>3.88</td>
<td>3.89</td>
<td>3.91</td>
<td>3.94</td>
<td>3.69</td>
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<tr>
<td>12</td>
<td>My instructor is regularly available for consultation.</td>
<td>3.46</td>
<td>3.65</td>
<td>3.34</td>
<td>3.86</td>
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<td>3.64</td>
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<tr>
<td>13</td>
<td>My instructor is fair and impartial when dealing with students.</td>
<td>3.60</td>
<td>3.71</td>
<td>3.63</td>
<td>3.82</td>
<td>3.78</td>
<td>3.69</td>
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<tr>
<td>14</td>
<td>My instructor recognizes when students fail to comprehend.</td>
<td>3.14</td>
<td>3.47</td>
<td>3.42</td>
<td>3.73</td>
<td>3.89</td>
<td>3.62</td>
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<tr>
<td>15</td>
<td>My instructor makes me feel free to ask questions in class.</td>
<td>3.54</td>
<td>3.88</td>
<td>3.58</td>
<td>3.86</td>
<td>3.83</td>
<td>3.63</td>
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<td><strong>3.72</strong></td>
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<td>Evaluation Items (cont.)</td>
<td>H180, Fall 2010</td>
<td>H180, Summer 2011</td>
<td>H263, Fall 2009</td>
<td>H263, Spring 2011</td>
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<tr>
<td>16</td>
<td>Announced course objectives agree with what is taught.</td>
<td>3.46</td>
<td>3.53</td>
<td>3.63</td>
<td>3.68</td>
<td>3.83</td>
<td>3.67</td>
</tr>
<tr>
<td>17</td>
<td>I know what is expected of me in this course.</td>
<td>3.40</td>
<td>3.76</td>
<td>3.66</td>
<td>3.64</td>
<td>3.83</td>
<td>3.76</td>
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<tr>
<td></td>
<td><strong>Category Averages</strong></td>
<td><strong>3.43</strong></td>
<td><strong>3.65</strong></td>
<td><strong>3.64</strong></td>
<td><strong>3.66</strong></td>
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<td><strong>3.71</strong></td>
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<td>COURSE ELEMENTS</td>
<td><strong>Reading and Assignments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td>Overall, I would rate the textbook/readings as excellent.</td>
<td>2.83</td>
<td>3.35</td>
<td>2.76</td>
<td>3.64</td>
<td>3.67</td>
<td>3.64</td>
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<tr>
<td>19</td>
<td>Course assignments help in learning the subject matter.</td>
<td>3.11</td>
<td>3.65</td>
<td>3.42</td>
<td>3.64</td>
<td>3.67</td>
<td>3.74</td>
</tr>
<tr>
<td>20</td>
<td>Complexity and length of course assignments are reasonable.</td>
<td>3.37</td>
<td>3.82</td>
<td>3.47</td>
<td>3.77</td>
<td>3.78</td>
<td>3.71</td>
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<td></td>
<td><strong>Category Averages</strong></td>
<td><strong>3.13</strong></td>
<td><strong>3.61</strong></td>
<td><strong>3.22</strong></td>
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<td><strong>3.70</strong></td>
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<td>COURSE ELEMENTS</td>
<td><strong>Difficulty</strong></td>
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<tr>
<td>21</td>
<td>The level of difficulty of this course is appropriate for me.</td>
<td>3.34</td>
<td>3.76</td>
<td>3.50</td>
<td>3.68</td>
<td>3.67</td>
<td>3.64</td>
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<td><strong>3.34</strong></td>
<td><strong>3.76</strong></td>
<td><strong>3.50</strong></td>
<td><strong>3.68</strong></td>
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<tr>
<td>22</td>
<td>The grading procedures for the course are fair.</td>
<td>3.46</td>
<td>3.71</td>
<td>3.63</td>
<td>3.86</td>
<td>3.89</td>
<td>3.67</td>
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<tr>
<td>23</td>
<td>The exams cover the most important aspects of the course.</td>
<td>3.37</td>
<td>3.82</td>
<td>3.58</td>
<td>3.86</td>
<td>3.83</td>
<td>3.67</td>
</tr>
<tr>
<td>24</td>
<td>Exams in this course are fair.</td>
<td>3.43</td>
<td>3.82</td>
<td>3.58</td>
<td>3.68</td>
<td>3.89</td>
<td>3.67</td>
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<tr>
<td>25</td>
<td>Feedback on exams indicated clearly my standing in the course.</td>
<td>3.31</td>
<td>3.41</td>
<td>3.37</td>
<td>3.86</td>
<td>3.88</td>
<td>3.62</td>
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<td>STUDENT DEVELOPMENT</td>
<td><strong>Knowledge and Skills</strong></td>
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<td></td>
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<tr>
<td>26</td>
<td>I learned a lot in this course.</td>
<td>3.20</td>
<td>3.53</td>
<td>3.39</td>
<td>3.68</td>
<td>3.78</td>
<td>3.67</td>
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<tr>
<td>27</td>
<td>I developed the ability to solve actual problems in this field.</td>
<td>3.11</td>
<td>3.59</td>
<td>3.05</td>
<td>3.73</td>
<td>3.67</td>
<td>3.69</td>
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<td></td>
<td><strong>Category Averages</strong></td>
<td><strong>3.16</strong></td>
<td><strong>3.56</strong></td>
<td><strong>3.22</strong></td>
<td><strong>3.70</strong></td>
<td><strong>3.72</strong></td>
<td><strong>3.68</strong></td>
</tr>
</tbody>
</table>
Teaching Portfolio
Cheng-Chia B. Chen

PhD Candidate
Department of Applied Health Science
School of Public Health
Indiana University Bloomington

Email: brichen@indiana.edu
Text: 812 250 6658

Please visit my multimedia site
http://pages.iu.edu/~brichen/

Created by Cheng-Chia "Brian" Chen
Version 1.0