HP 4170: TESTING, EVALUATION, AND PRESCRIPTION OF EXERCISE IN HEALTH AND HUMAN PERFORMANCE

1. Identification of Course

1.1. HP 4170- Testing, Evaluation, and Prescription of Exercise in Health and Human Performance (3-3-0)

Prerequisites: HP 3550, 3560; junior-senior classification.

1.2. Textbook(s) and/or Supplementary Materials


Supplementary Materials:

Additional resources, readings, and/or references for this course provided throughout the semester as appropriate. These supplementary materials are generally posted in Moodle (or Blackboard) for this course.

1.3. General Information

Professor: Tiina T. Garrison, Ph.D., M.S., CSCS
Office: HHP 145
E-mail: garrison@nsula.edu
Phone number: 318-357-5133, 318-613-3221 (cell)
Availability: Through email and by appointment; Office hours posted on office door and online.

2. Course Description

2.1. Practical application of the theory of exercise science aimed at adult populations in order to provide the student with sufficient knowledge to develop and prescribe appropriate exercise programs, and to assess individual levels of fitness.

This course presents and puts into practice various tests and measurement techniques with emphasis on those techniques associated with the assessment of
kinesiological and physiological parameters. It is both lecture and lab, with the laboratory sessions designed to practice test administration, scoring procedures, data analysis, and grading techniques.

3. **Goals and Objectives**

3.1. **Goals**

The specific goals of this course include developing proficiency in exercise testing and prescribing appropriate exercise programs while utilizing the guidelines and recommendations set by the American College of Sports Medicine and other recognized sources of relevant information. Texts, lectures, presentations, written assignments, and discussions will all be used to help students understand issues involved in the measurement process. An extensive amount of work outside the classroom will be required for this course.

3.2. **Objectives**

1. Apply concepts of measurement and evaluation in health and human performance and to identify the basic components of fitness and benefits associated with each component.
2. To identify the major CAD risk factors.
3. To understand contraindications for testing and when a physician should be present.
4. To utilize ACSM guidelines on health history and risk appraisal to determine appropriate exercise prescription.
5. Describe various applications of measurement instruments in health, physical education, and sport.
6. To understand when it is appropriate to stop a test.
7. To assess and interpret blood pressure and cardiorespiratory status, and body composition measures.
8. To design appropriate exercise prescription based on physiological principles for a variety of different populations and to administer fitness and sports skills tests in students.
9. Apply scientific (validity, reliability) and administrative criteria in selecting and developing measuring instruments.
10. Identify the various types of "norms."
11. Explain the use of measuring instruments and tests that are utilized when measuring physical and motor fitness components.

4. **Student Activities and Experiences**
Disability Policy:
It is the policy of NSU to accommodate students with disabilities, pursuant to federal law, state law, and the University’s commitment to equal educational opportunities. Any student with a disability who needs accommodations, for example in seating placement or in arrangements for examinations, should inform the instructor at the beginning of the course. Students with disabilities are encouraged to contact the Office of Disability Support, which is located in Student Union, Room 240-A, telephone 357-4460.

NSU Classroom Civility Statement:
Each Northwestern State University student is encouraged to help create an environment that promotes learning, dignity, and mutual respect for everyone in the learning environment. Students who speak at inappropriate times, take frequent breaks, interrupt the class by coming to class late or leaving early, engage in loud or distracting behaviors, use cell phones or pagers (other noise-making devices like watches with alarms), listen to headphones/CDs, play with computers or hand held games, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others during the class period may be asked to leave the class and subjected to disciplinary action under the Northwestern State University Student Code of Conduct and Sanctions (Article VII Sanctions). The instructor of a course may deem additional behaviors or actions inappropriate; these actions or behaviors will be outlined in the course syllabus. Copies of the infractions and sanctions are available on the NSU website at: http://www.nsula.edu/studenthandbook/page100.htm

Definition of Diversity:
Today members of our university community are more likely to experience differences among people. Northwestern State University defines diversity as differences in age, gender, religion, language, sexual orientation, socioeconomic status, ethnicity, race, exceptionalities, and geographic background. In our mission to acknowledge our differences, we also hope to realize our commonalities.

4.1. Assignments and/or Tasks
4.1.1. Assignments and/or tasks will be given during the semester and the due dates will be announced in class and/or posted on Blackboard. If you miss class, no make-up assignments will be available.

5. Content Outline/Course Calendar

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<tr>
<th>TENTATIVE SCHEDULE OF ACTIVITIES:</th>
<th>ACSM GL</th>
<th>ACSM RM</th>
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<tr>
<td><strong>COURSE TOPICS:</strong></td>
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<tr>
<td>Week 1  Class Introduction</td>
<td>chp 1</td>
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<tr>
<td>Benefits and Risks Associated with PA</td>
<td>chp 2</td>
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<td>Week 2  Health Appraisal and Risk Stratification</td>
<td>chp 1-2</td>
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<td>Week 3  Practical application of Risk Stratification</td>
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<td>Review</td>
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<td>Week 4  TEST 1</td>
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Course Steward: HP 4170 Exercise Testing and Rx
Date syllabus revised: January 2011

College of Education & Human Development
Northwestern State University of LA
Pre-exercise Evaluations
LAB: BP, HR, RPE,
Health-Related Physical Fitness Testing and Interpretation
Week 5
Body Composition, CR fitness testing, muscular fitness & flexibility assessment
Week 6 FITNESSGRAM and Psychological testing
Personality traits, physical activity attitudes inventory
Week 7 Skill-related Physical Fitness Testing
Psychomotor testing, balance, reaction time, Power, agility, sports-skills
Week 8 Principles of Ex Rx
Physical activity programming for adults and children.
Week 9 TEST 2
Ex Rx for Healthy Populations and special considerations
Week 10 CR Ex Rx
Adaptations to CR training
Week 11 Musculoskeletal Ex Rx
Week 12 Adaptations to resistance training
Weeks TBA
13-16 TBA

6. Evaluation Policies
General University grading policies are located in the current General Catalog under the heading of Academic Regulations. Policies of this course are in compliance with University regulations.

6.1. Attendance:
Attendance and participation are mandatory for successful completion of course requirements. In the event of a planned excused absence; each student is responsible for information, assignments, and quizzes administered during the absence period. All quizzes and exams missed during a planned excused absence period will be completed on the day of the last exam without exception. No make-up work will be allowed for unexcused absences and a zero (0) will be assigned for all respective assignments, quizzes, and exams without reservation.

6.2. Grading
Written and Practical Exams (200 pts.): Three to four (3-4) written and/or practical exams worth 50-100 points each will be administered during the semester. Exams will be used to assess your knowledge and application of both
material covered in the lecture and from laboratory experiences. Exams will be 85% of total grade.

**Case Studies/Position Stand Review (50 pts.):** You will be required to assess risk and/or write an appropriate exercise prescription based on concepts learned in the lecture.

**On-line Quizzes:** Six on-line quizzes have been posted on Blackboard to help you study. These exams will be each 1.5% of the total grade (i.e. 9% all together).

Course letter grades will be determined based on overall performance as a percentage of the total points. The following percentage scale will be used to determine final grades:

- 90-100% A
- 80-90% B
- 70-80% C
- 60-70% D
- 0-60% F

7. **Other Policies**

7.1. **Wireless Phones**

Classroom disruptions involving wireless phones will not be tolerated. All wireless phones **must be turned off** prior to the start of class. If any student engages in disruptive behavior involving a wireless phone during class or laboratory activities he/she will be asked to leave and/or receive a “zero” for any attendance and/or assignments for that class period without a warning.