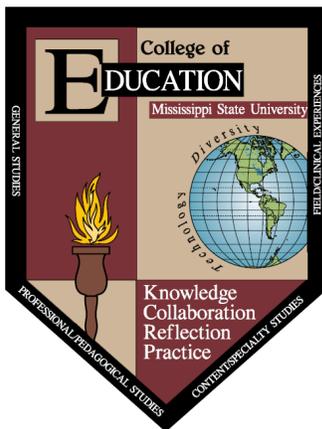


**MISSISSIPPI STATE UNIVERSITY
COLLEGE OF EDUCATION**

**DEPARTMENT of KINESIOLOGY
COURSE SYLLABUS**

Course Prefix & Number:	EP 4133
Course Title:	Exercise Programs for Clinical Populations
Credit Hours:	Three (3) semester hours
Course Type:	Lecture/Field experience
Catalog Description:	Provides study of and practice in conducting adult fitness programs and fitness testing procedures.

College of Education Conceptual Framework:



The faculty in the College of Education at Mississippi State University are committed to assuring the success of students and graduates by providing superior learning opportunities that are continually improved as society, schools, and technology change. The organizing theme for the conceptual framework for the College of Education at Mississippi State University is educational professionals - dedicated to continual improvement of all students' educational experiences. The beliefs that guide program development are as follows:

1. **KNOWLEDGE** - Educational professionals must have a deep understanding of the organizing concepts, processes, and attitudes that comprise their chosen disciplinary knowledge base, the pedagogical knowledge base, and the pedagogical content knowledge base. They must also know how to complement these knowledge bases with the appropriate use of technology.
2. **COLLABORATION** - Educational professionals must continually seek opportunities to work together, learn from one another, forge partnerships, and assume positions of responsibility.
3. **REFLECTION** - Educational professionals must be willing to assess their own strengths and weaknesses through reflection. They must also possess the skills, behaviors, and attitudes necessary to learn, change, and grow as life-long learners.
4. **PRACTICE** - Educational professionals must have a rich repertoire of research-based strategies for instruction, assessment, and the use of technologies. They must be able to focus that array of skills on promoting authentic learning by all students or clients, while exhibiting an appreciation and commitment to the value and role of diversity.

Course Objectives:

At the conclusion of the course, students will be able to demonstrate knowledge, skills, and abilities in the following areas (CFPOs 1, 3, 4, 5, 8, 9, and 10):

- The benefits and risks of exercise programs for people with pathologies.
- The principles and practices of physical fitness assessment for persons with pathologies.
- The principles and practices of exercise programming for people with pathologies.
- The pathophysiology of certain metabolic, cardiovascular, pulmonary, and neuromuscular conditions.

Students will demonstrate an understanding of individual differences in physiology and behavior brought about by chronic health conditions (CFPOs 2-3).

Topics Covered in the Course:

1. Exercise Testing & Prescription Fundamentals (*6 hours*)
2. Diabetes (*4 hours*)
3. Hypertension (*3 hours*)
4. *Exam 1*
5. Myocardial Infarction (*4 hours*)
6. Revascularization of the Heart (*4 hours*)
7. Peripheral Arterial Disease (*3 hours*)
8. *Exam 2*
9. Chronic Obstructive Pulmonary Disease (*3 hours*)
10. Spinal Cord Injury (*4 hours*)
11. Cystic Fibrosis (*3 hours*)
12. *Exam 3*
13. Multiple Sclerosis (*4 hours*)
14. Cerebral Palsy (*4 hours*)
15. Down Syndrome (*3 hours*)
16. *Exam 4*

Required Text:

Ehrman, J.K., Gordon, P.M., Visich, P.S., Keteyian, S.J. (2013). *Clinical exercise physiology*, 3rd Edition. Champaign, IL: Human Kinetics.

The textbook may be purchased from the publisher (Human Kinetics) as an e-book at a lower price.

Visit this site: <http://www.humankinetics.com/products/all-products/Clinical-Exercise-Physiology-3rd-Edition>

Supplementary Materials:

Lecture outline slides and other materials will be made available on-line at <https://mycourses.msstate.edu>; login with your MSU NetID and NetPassword.

Methods of Instruction: Lecture; field observation of clinical program; reflection paper on observation

Suggested Student Activities:

Observation of a clinical exercise program and composing of a reflection paper on this observation. More specific information can be found on the following pages of this Syllabus.

Honor Code:

“As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.”

Any student engaging in cheating, fabrication, multiple submission, plagiarism, complicity, or other acts of academic misconduct will face the sanctions described in the Honor Code of Mississippi State University. These sanctions may include receiving an F to assignments or as a final grade. Here are some definitions from the Honor Code (section I.C):

- **Cheating:** Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices or materials in any academic exercise
- **Fabrication:** Making up data or results and recording or reporting them
- **Multiple Submission:** The submission of substantial portions of the same work (including oral reports) for credit more than once without authorization from the instructor of the class for which the student submits the work
- **Plagiarism:** The appropriation of another person's ideas, processes, results, or words without giving appropriate credit
- **Complicity:** Intentionally or knowingly helping, or attempting to help, another to commit an act of academic dishonesty

Information on the Honor Code of Mississippi State University can be found at: <http://www.honorcode.msstate.edu/>

Technology:

PowerPoint presentations; online videos; animations on pathological physiology and movement; technologies observed in rehabilitation settings

Disability:

Students who have a disability that requires any type of accommodation must see the instructor immediately. Students with disabilities as well as low income and first generation students should be aware that Student Support Services at MSU can support them in becoming successful academically. More information about Student Support Services can be found at: <http://www.sss.msstate.edu/>

Diversity:

Diversity in this course will be addressing how exercise professionals should adjust their services according to the mobility and health profiles of people with various morbidities. This will be accomplished by lectures, readings, and the field component of this course.

Field Component:

Students are required to complete a minimum of 20 hours volunteering in one to up to three physical activity programs for people with clinical conditions. During these hours, students are required to follow the directions of an appropriate supervisor at the site and contribute to the function of the program. It is expected that students will demonstrate proper work ethic and a willingness to contribute to the program. Eligible programs for this activity are only those that serve primarily clinical populations and include some exercise aspect. Examples of such programs are: Cardiac or Pulmonary Rehabilitation, Physical or Occupational Therapy, Special Olympics events, Chiropractic Medicine, community-based wellness programs for older adults, nursing homes such as Parker House or Angel Garden, etc. **Programs that serve primarily healthy individuals are NOT eligible.** If in doubt about the program you want to observe, please inquire with the course instructor. Volunteer opportunities may also exist through the MSU Maroon Volunteer Center: <http://mvc.msstate.edu>. All of the aforementioned factors will determine the number of points that students will earn for this activity. Students may split the 20 hours between a maximum of three different programs. Students may use hours that they will also use to complete requirements for professional schools; **however, students CANNOT use hours from their internships.** To document the hours, students should use the form titled *Documentation of Observation Hours* posted on myCourses. The form must be signed by the supervisor(s) at the site(s) and must be turned in by the student. If you observe several different programs, you must submit a separate form for each program. **Students may earn up to 10 Bonus Points by completed extra observation hours (up to 5 additional hours; 2 bonus points per hour).**

Reflection Paper on Observation

Students are required to submit a reflection paper on their observation experience described in the previous section. The paper must be between a minimum of 3 and a maximum of 4 pages. It must be typed, double-spaced, with Times New Roman 12-pt fonts, with 1-inch margins around, and with no empty lines between sections. Please follow these instructions carefully. The paper will be evaluated, among other factors, for appropriateness of the observation, understanding of the program, clarity, coherence, grammar, syntax, length, and structure. The paper must include the following components; **please use these exact headings in the paper.**

1. Student Name
2. Name of Clinical Program(s) Observed
3. Description of Clinical Program(s) Observed
4. Benefits of Program(s) to Clients (*include comments on the value of exercise for clients*)
5. Type of Student Involvement
6. What I Learned (*what you learned that you did not know or did not expect*)

7. Suggestions for Program Improvement

IMPORTANT

Students who miss deadlines for any of the assignments/exams of this class without a valid excuse will get a zero on that assignment/exam. If you have a valid excuse for missing an assignment/exam, you must inform the instructor by e-mail before the due date. **Written documentation of your excuse is due immediately** (e.g., evidence you were seen by a doctor, your boarding pass for an emergency plane trip). Vacation plans, out of town visitors, work-related issues, interviews, GRE, and assignments due in other classes are NOT acceptable excuses.

Evaluation of Student Progress:

Evaluation Type	Points Possible	Grading Scale	
Exam 1	100 pts	A	90 – 100%
Exam 2	100 pts	B	80 – 89%
Exam 3	100 pts	C	70 – 79%
Exam 4	100 pts	D	60 – 69%
Quizzes	30 pts	F	0 – 59%
Observation of Clinical Program(s)	40 pts		
Reflection Paper on Observation	30 pts		
<i>Total Possible Points</i>	<i>500 pts</i>		

Exams

The exams will include elements from lectures and readings, and they will NOT be cumulative. Expect challenging exams with multiple choice and True/False questions. Unless otherwise indicated, the exams will include elements from assigned readings that might NOT be covered during lecture. You will perform well on the exams only if you keep up with the readings and prepare appropriately. Students who miss an exam without a valid excuse will get a zero. Make-up exams can be administered at the discretion of the professor **ONLY IF**: a) the student has a valid excuse and b) the student contacts the professor **PRIOR** to the exam date.

Quizzes

There will be several quizzes during the semester. **These quizzes will NOT be announced** and they will be on prior material covered in lectures and assigned readings. The quizzes will be available only during class. It is strongly recommended that students attend lecture and keep up with readings and all presented information.

Bibliography:

American College of Sports Medicine (2009). *ACSM's guidelines for exercise testing and prescription*. 8th ed. Lippincott Williams & Wilkins, Baltimore, MD.

LeMura, L. M., von Duvillard, S. P. (2004). *Clinical exercise physiology: Application and physiological principles*. Lippincott Williams & Wilkins, Baltimore, MD.

McArdle, W. D., Katch, F. I., Katch, V. L. (2010). *Exercise physiology: Nutrition, energy, and human performance*. Lippincott Williams & Wilkins, Baltimore, MD.

Skinner, J. S. (2005). *Exercise testing and exercise prescription for special cases: Theoretical basis and application*. Lippincott Williams & Wilkins, Baltimore, MD.