

**MONTGOMERY COLLEGE**

Department of Health Enhancement, Exercise Science and Physical Education  
Rockville Campus

**SYLLABUS**

**PHED 237: Fitness Assessment & Programming (3 credits)**  
**Semester**  
**CRN #**

**I. Instructor Information**

Instructor:  
Office:  
Phone:  
Email:  
Office Hrs:

**II. General Course Information**

PHED 237  
Day/Time  
Room:

Catalog Description:

An examination of scientifically-based assessment techniques used to evaluate cardio-respiratory endurance and body composition. Principles of exercise, interpretation of assessment results, and program design are applied to develop safe, individualized exercise programs for apparently healthy individuals and special populations using American College of Sports Medicine guidelines. Safety considerations, identification of risk factors, and contradictions are emphasized. (R only) **Assessment levels: A grade of C or better in PHED 206. Three hours each week.**

**III. Common Course Student Learning Outcomes:**

*This course is designed to cover the material needed to successfully pass the ACSM CPT Exam.*

- Identify appropriate techniques to evaluate the health status of potential fitness participants.
- Describe the normal cardiorespiratory responses to cardiorespiratory fitness testing in terms of heart rate, blood pressure, and oxygen consumption.
- Define and describe how METs and kilocalories utilization are measured during physical activity.
- Demonstrate knowledge of field and laboratory techniques involved in assessing cardiorespiratory fitness including bicycle ergometer, treadmill, and metabolic measurement calculations.
- Design safe and effective cardiorespiratory exercise fitness programs for apparently healthy and special population with an understanding of normal and pathological responses.
- Describe appropriate program design modifications for individuals with diabetes, obesity, hypertension, musculoskeletal problems, pregnancy (prenatal and postnatal) and exercise-induced asthma.

- Demonstrate how to calibrate various measuring instruments that are used in a variety of fitness assessment tests.
- Identify and demonstrate the techniques involved in laboratory and field assessments of body composition, including impedance, calipers, and water displacement.
- Demonstrate comprehension of key concepts concerning weight management.
- Identify strategies and methods for motivating participants, increasing adherence to lifetime fitness.
- Demonstrate knowledge of common medications and effect on exercise testing and program design.

#### IV. Textbooks and Supplies

##### Required Text:

Health Fitness Bundle- ISBN: 9781469896212 at MC bookstore or publisher

You can purchase the bundle or each book separately

- **ACSM's Exercise Testing and Prescription ISBN:9781496338792**
- **ACSM's Guidelines for Exercise Testing & Prescription, 10e ISBN:9781496339065**
- **ACSM's Health-Related Physical Fitness Assessment Manual, 4e ISBN:9781451115680**

In addition, the PHED206 Text will be used in class American College of Sports Medicine (2014). ACSM'S Resources for the Personal Trainer (4th Edition). Philadelphia, PA: Lippincott, Williams & Wilkins ISBN# 9781451108590

Directly from publisher:

<http://www.lww.com/search?search=9781469896212&specialties=b38ee19a133e4cd28f740f0689b552c9&producttype=cc2390f800d446e5b0103b4e6a34f897&FilterType=6&page=1>

The discount code for 20% of the price from the publisher is an announcement in the course website.

Link to MC Bookstores:

<http://cms.montgomerycollege.edu/edu/departments2.aspx?id=6511>

##### Other Required Materials:

- Pedometer/accelerometer- measures steps (can be borrowed)
- Heart rate monitor (can be borrowed)

Montgomery College Student Handbook -

<http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=55>

Access to the PHED 237 Course website -

1. Login to <http://www.montgomerycollege.edu>
2. Click on the "access MyMC" button at the top of the page.

3. Log into My MC with your user name and password.
4. In the upper right hand corner, click on the "Blackboard" tab
5. This will automatically log you into Blackboard. Look for the PHED 237 class and click on this tab.

Various course materials, syllabus, assignments, and labs are posted here.

**Students are responsible for checking and participating in the site on a weekly basis.**

## V. Course Requirements

### General

In order for students to be successful in this course they will need to prepare for each class by completing the assigned readings, completing all assignments (including labs, homework assignments, projects, etc.) by the appropriate due dates and coming to classes prepared to participate in all activities.

### Course Grade

<b>Class Assignments</b>	<b>40 points (4@10 pts each)</b>
<b>Class Project</b>	<b>100 points (see instructions)</b>
<b>Exercise Programs</b>	<b>50 points (2@25 pts each)</b>
<b>Labs</b>	<b>50 points (2@25 pts each)</b>
<b>Pedometer Project</b>	<b>60 points (see instructions)</b>
<b>Practical Assessments</b>	<b>100 points (2@25 &amp; 1@50 points)</b>
<b>Tests</b>	<b>100 points (2@50 pts each)</b>
<b>TOTAL POINTS</b>	<b>500 points</b>

### Standards

**Final grades will be determined by total points accumulated through the semester. The final points necessary for a given letter grade will be based upon the following percentage scale:**

90% of total possible points = A	450-500 points
80% of total possible points = B	400-449 points
70% of total possible points = C	350-399 points
60% of total possible points = D	300-349 points
Less than 60% of total possible points = F	0 – 299 points

### **Class Assignments (40 points):**

- There are 4 class assignments.
- Students are expected to come prepared and participate on all class workout days (see course schedule). This includes proper dress (see participation).
- Attendance in class is required to complete all class is required for all assignments. Students who are not present during the in-class assignment review will not be able to submit the assignment.
- **All Class Assignments will be submitted in person by the due date.**

### **Class Project (100 points) – More information TBA**

- Students will develop a comprehensive cardiorespiratory program for an assigned individual. Further details will be given in class. See the course

- schedule for due dates.
- For those students currently enrolled in PHED 230, this project will be linked to your PHED 230 class project. Details will be discussed in class.
  - Students must submit all three parts of the paper by the appropriate due dates. If you do not submit Part I of the project by the due date, you will not be able to submit Parts II, III & IV. If you submit Part I but do not submit Part II of the project by the due date you will not be able to submit Part III, etc.
  - **Parts I - III will be submitted will be submitted in person by the due date.**

#### Exercise Programs (50 points):

- Students will design a multi-week cardiorespiratory programs based on the results of your fitness assessments.
- These programs will be graded on accuracy and practicality of the program
- More information to be discussed in class.
- All programs are due by their assigned due dates. **No work will be accepted late** (Please see late policy for more information). **All work will be submitted through Blackboard. No assignments will be accepted in class.**

#### Labs (50 points):

- Throughout the semester each student will complete **two assigned** (2 labs @ 25 points each) Labs are designed to measure your current fitness level and assess your knowledge of cardiorespiratory fitness and body composition.
- Portions of each lab will be completed during class and each lab will contain critical thinking questions that will be completed outside of the class meeting time.
- Students who are absent on assigned lab dates will not be able to make up the work outside of class time.
- All labs are due by their assigned due dates. **No labs will be accepted late** (Please see late policy for more information). **All work will be submitted through Blackboard. No assignments will be accepted in class.**
- Students are expected to come prepared to participate in all labs. This includes proper dress (see participation), completion of assigned readings and familiarization with lab protocols as assigned by the professor. Students who are not completely prepared to participate in the lab will be asked to leave and will receive a zero for the lab.

**Pedometer Project (60 points):**

- As fitness professionals, it is important that you model health exercise behaviors that include meeting/exceeding the minimum ACSM guidelines for physical activity and cardiorespiratory exercise.
- Students will participate in a pre-screening, weekly logs and post screening assignment to help you assess and track your weekly physical activity.
- Students will be graded on the completion of the project and the ability to meet/maintain the exercise guidelines and manage or improve current cardiorespiratory fitness levels.
- Pre/Post Check assignment due dates are available in the course schedule. Both assignments will be submitted in person by the due date.
- Weekly logs will be due in class on the Tuesday following the week. For example, Week 1 log (9/3 – 9/9) is due on Tuesday, 9/11.

**Practical Assessments (100 points):**

- Students will participate in three practical assessments. One will evaluate the students ability to assess a client's cardiorespiratory fitness, one will evaluate body composition skills and one will assess the students ability to implement a cardiorespiratory program based on the information submitted with the class project.
- More information regarding the procedures for the final will be discussed in class.
- Students will sign up for specific assessment time slots. Students who show up late or miss their assigned time slots will not be able to make up the practical assessment.

**Tests (100 points)**

There will be two non-cumulative exams (50 points each). The exams will consist of multiple choice, true/false, short answer, and essay questions. Exams will cover all of the material that is presented in class and assigned from the text. **No makeup exams will be given.** In case of an emergency, you must contact the professor within 24 hours of the exam and may be asked to provide proof of the emergency in order to take the exam. These exams will be given in-person and/or online through Blackboard.

**Late Policy**

**Work will NOT be accepted after the day it is due. Deadlines and due dates are not negotiable. This applies to class assignments, in-class activities, labs, and long-term assignments.**

*Assignments due in class will be considered LATE if they are not in the instructor's hands by the time the class period ends (2:15 pm) on the day they are due. Therefore, if you are ill or have a conflict with class, you should e-mail your assignment or drop it off BEFORE class begins. If you are working on an assignment in class that was already due, you will not receive credit for the assignment, and may be asked to leave the class.*

Assignments due on Blackboard (BB) are due at 11:59 pm on the assigned due date. No assignments will be accepted after the due date. If you are experiencing technical issues, contact the Blackboard help desk and follow the procedures under Blackboard – Technical Issue.

If a student forgets an assignment, leaves it in the car, has a printer problem, or any other excuse, he or she MAY turn in the assignment (by fax, e-mail, or in-person) up until MIDNIGHT on the due date. However, 5% of the grade will be AUTOMATICALLY deducted for each hour it is late. For example, if you turn in your assignment at 5:15 pm, you will lose 15% of the total grade in addition to any points deducted through the grading process. Any work turned in after midnight on the due date will automatically receive a zero.

*Therefore, stay aware of the syllabus and class announcements for due dates, and do not be late to class.*

**Suggestion:** When sending an email to your professor, save a copy of the email to your "sent" mailbox.

## **VI. Participation and Communication**

### Attendance

Students are expected to attend class and to be on time. Graded assignments might be completed at the beginning of each class. Thus, excessive absences or lateness will affect final grades. If a student has excessive absences, as defined in the Student Handbook, the instructor reserves the right to drop them from the course. However, if the student decides that they no longer want to participate in the course withdrawal by the appropriate "drop" date is ultimately the responsibility of the student.

### Participation

PHED 237 is a professional major's class. Student's are expected to act on a professional level this includes; class attendance, dress and class behavior. Attendance will be recorded each class period, students are expected to arrive on time and prepared for the class's scheduled activities. Student's who miss class, arrive late or leave early and cannot complete scheduled class assignments will lose points on these assignments.

\*\*\* Throughout the semester the class will be meeting in the fitness center (PE 137B) to exercise and complete assessments of physical fitness, students must be dressed in appropriate workout attire to participate in these class activities. Students who are not dressed in appropriate workout attire will not be permitted to participate in class and will not be allowed to make up the assigned lab. Appropriate workout attire includes proper athletic footwear and comfortable clothing. Jeans and hiking boots are not appropriate attire. Workout days will be announced in class the week prior. If you miss class, you are still responsible for being prepared to exercise.

The coursework for PHED 237 has required fitness assessments and workouts at high intensity levels. These workouts include running, rowing and cycling. If you are unable to perform the assessments or workouts at a high intensity level, you will need to have a physician complete the "Medical Release" form specifically indicating the nature of the restrictions, appropriate activity level and length of disability. If the disability is more than two weeks, you will need to meet with me to discuss alternative cardiorespiratory fitness programming which may include using a pool for low impact activity. If you are unable to complete the assessments and programs, adaptations based on medical restrictions will be discussed.

### Communication

Student e-mail (montgomerycollege.edu) is an official means of communication for the College. It is expected that you check your student e-mail regularly and frequently, as you are responsible for information that will be sent to you from the College. If you contact me through e-mail, you must use your student MC e-mail account.

IMPORTANT: E-mails do not express tone of voice or body language so strive to use careful wording to convey your desired message. Please take an extra minute when sending an e-mail to think about what you want to say, spell-check your e-mail, and use appropriate, courteous, and professional language. Your professor will strive to do the same in all communications. E-mails will be answered within 48 hours during week days. If an e-mail is sent during a weekend or holiday, please expect a reply the following working day.

### Use of Technology during class

Turn off cell phones, MP3 players, beepers and all other electronic devices prior to class. Students are not allowed to use these electronic devices during class time. Students who using these devices during class time will be asked to leave the classroom for the remainder of the class period (this includes phones that ring or vibrate during the class period).

Laptop computers may be used for note taking only. Students using laptops that do not directly involve classroom activities will be asked to leave for the remainder of the class period.

### Blackboard – Technology:

It is the student's responsibility to be familiar with how to use Blackboard. If you are unfamiliar with the technology, you should visit the following web addresses to prepare for this course.

<http://cms.montgomerycollege.edu/EDU/Department2.aspx?id=9294>

### Blackboard – Technical Issues:

If during the course you experience a technological problem with Blackboard, you need to follow the procedures below. Following these correct procedures may allow you to re-submit an online assessment or be granted an extension to a course deadline (if necessary) depending on the circumstances and approval from your professor.

1. Call the IT Service Desk at 240-567-7222 to report your problem.
2. Write down the work order number received from the IT Service Desk.
3. Send an email to your professor identifying: the date and time of the phone call, the work order number, the nature of the problem, the steps to resolution suggested by Blackboard and the outcome of the phone call. This email must be sent within 1 hour of contacting the IT Service Desk.

\*If in doubt, contact the IT Service Desk if you are experiencing a problem. Students who do not follow the instructions above will not be able to resubmit work due to technical errors.

## **VII. Montgomery College Information**

In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The link below provides information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies. All students must review this link prior to signing the syllabus acknowledgement form.

<http://cms.montgomerycollege.edu/mcsyllabus/>

### Student Responsibility

**You are responsible for your OWN learning.** The syllabus, course schedule and course website are designed to help you understand the course expectations and provide you resources to manage the course. I am available to help and answer questions but you need to contact me or come to my office hours if you need assistance.



<b>Date</b>	<b>Topic</b>	<b>Due Dates/ Info</b>
T -	Syllabus & Class Overview	
TH -	Physical Activity & Health – ACSM Chap. 1 & 2/ Guidelines Chap. 1	
T -	Exercise Physiology Review ACSM CPT Manual Chap 3 & 5	<b>*Begin Pedometer - 9/3</b>
TH -	Pre-participation Screening ACSM Chap. 3/ Guidelines Chap 2 & 3	
T -	Cardiorespiratory (CRF) Testing – Overview ACSM Chap. 4/ Guidelines pg. 79-92	<b>Case Study Assign.</b>
TH -	<i>1.5 Mile Run/Walk Assessment</i>	
T -	<i>YMCA Cycle Assessment</i>	<b>Pedometer – Pre Check</b>
TH -	<i>Row Assessment</i>	
T -	<i>VO2 Testing</i>	
TH -	<i>VO2 Testing</i>	
T -	<b><i>CRF Practical Exam</i></b>	
TH -	<b><i>CRF Practical Exam</i></b>	<b>CRF Assessment Lab BB</b>
T -	Goal Setting & Ex Rx Overview ACSM Chap. 6/ Guidelines pg. 143 - 147	
TH -	CRF Programming ACSM CPT Manual Chap 15/ Guidelines pg. 147 -160	<b>Goal Setting Assign.</b>
T -	<i>CRF Baseline Assignment</i>	
TH -	<i>CRF Program Design</i>	<b>CRF Baseline Assign.</b>
T -	<i>CRF Program Design</i>	
TH -	Body Composition (BC) & Weight Management	<b>Test #1 BB</b>
T -	Body Composition Assessment ACSM Chap. 6/Guidelines pg. 70 - 79	<b>CRF Program Design BB</b>
TH -	<i>Skinfolds &amp; Circumferences</i>	
T -	<i>BIA &amp; BodPod</i>	<b>Part I – Class Project</b>
TH -	<b><i>Skinfold &amp; Circumference Practical</i></b>	<b>BC Assessment Lab BB</b>
T -	<i>1.5 Mile Run/Walk Assessment - Reassessment</i>	
TH -	<i>Interval Training Design</i>	<b>Pedometer – Post Check</b>
T -	Body Composition Programming	<b>Part II – Class Project</b>
T -	Body Composition Program Design	<b>Interval Training BB</b>
TH-	Special Populations Program Design Overview ACSM Chap. 14, 15, 17, 21	
T-	Special Populations Program Design Overview (cont'd)	<b>BC Program Design BB</b>
TH-	<b>Test #2</b>	<b>Part III – Class Project</b>
TH -	<b>Final Exam: 10:15 – 2:30 pm in PE 140</b>	

**Guidelines – ACSM’s Guidelines for Exercise Testing & Prescription**  
**ACSM – ACSM’s Exercise Testing & Prescription**