

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

SPHE426

Principles of Corrective Exercise

Course Summary

Course: SPHE426 **Title:** Principles of Corrective Exercise

Length of Course: 8 weeks

Prerequisites: SPHE317 **Credit Hours:** 3

Description

Course Description:

SPHE426- Principles of Corrective Exercise. The purpose of this course is to provide an understanding of exercise physiology, biomechanics, and exercise prescription for those in need of remedial exercise programming. This course will examine the theory and practice associated with functional and corrective exercise program design and progression when movement dysfunctions and imbalances are present. In addition, scope of practice, limitations, and coordination of care with health care professionals will be addressed. (Prerequisite SPHE317)

Course Scope:

This course is meant to provide the student with the information then needed to prescribe corrective exercise for clients with movement impairments which may place that at greater risk of injury.

Objectives

After successfully completing this course, students will fulfill the following **Learning Objectives** (L.O.):

Each student will:

1. Prepare health appraisals including screening and risk stratification of apparently healthy individuals, prior to testing or exercise prescription.
2. Identify key screening results that require follow up by other medical providers as well as those that would fall within the scope of a Clinical Exercise Specialist.
3. Design an exercise prescription designed to increase flexibility/mobility by activating appropriate muscles and integrating newly available range of motion into a functional movement pattern.
4. Progress a client's exercise prescription in an appropriate and timely manner, in order to achieve long term goals.

Outline

Week 1:

Corrective Exercise what is it and why is it important for today's exercise scientist.

Topic(s)

Learning Objective(s)

1, 2, 3, 4

Weekly Objective(s)

- Identify why abhorrent movement patterns are becoming more prevalent.
- Understand how these abhorrent movement patterns lead to pain and poor quality of life.
- Understand the role of the CES in addressing these issues.

Reading(s)

Read Chapter 1: Rationale for Corrective Exercise

Read Chapter 2: Human Movement Science and Corrective Exercise

Assignment(s)

In this discussion, please introduce yourself. Share where you work or plan to work after completing your program, your family, and any hobbies or special interests. Also, tell us why you are taking this course and what you hope to gain from obtaining your degree. In addition, please take a look at the course objectives in the syllabus and discuss the relevance to your career goals.

Specific Instructions: Your initial post should be at least 250 words. Please respond to at least 2 other students. Responses should be a minimum of 100 words. This discussion submission serves as your official entry into the course, and this is why we have drawn special attention to this assignment. You will be reminded of this Discussion in the Week 1 Lesson, but please keep in mind that this Introduction Discussion must be submitted by 11:59 p.m., ET, on Sunday of Week 1 to maintain your registration in the course.

Week 2:

Topic(s)

- Components of Corrective Exercise: lengthening muscle, tendon and connective tissue to improve mobility, by inhibiting muscle spasm & tone.
- Newly found mobility must be integrated into the client's movement patterns in order to ensure that it is maintained.

Learning Objective(s)

1,2,3,4

Weekly objectives

1. Describe inhibitory techniques which will reduce muscle tension, thus allowing great mobility.

2. Describe static and dynamic lengthening exercises and when/how they should be performed
3. Describe exercises and their progression designed to activate and integrate improved mobility into the client's daily routine

Reading(s)

Chapter 3: Inhibitory Techniques.

Chapter 4: Lengthening Techniques

Chapter 5: Activation Techniques

Chapter 6: Integration Techniques

Assignment(s)

Discussion: Please develop a first day 4 step exercise prescription for a client who is unable to

1. Fully extend either hip joint beyond neutral
2. Has rounded shoulders.

Present at least 1 inhibitory, lengthening, activation and integration exercise for each of these conditions. Please provide sets and reps and time performed for each exercise. Make sure you use information from other courses when developing sets and reps, do not list 3 x 10.... Include a dynamic and static stretch and explain where and why you utilized them. Comment on two of your peers' posts.

Week 3: Initial assessment of the Client

Topic(s)

- Client assessment to ensure they are safe to participate in an exercise regime
- Postural assessment.
- Assessing the client's basic movement patterns and capabilities.
- Identifying abhorrent movement patterns and their underlying causes.

Course Objective(s)

1,2,3,4

Weekly Objective(s)

1. Screen a client for pre-existing medical conditions which would preclude them from participating in an exercise program.
2. Perform a static movement assessment of posture.
3. Perform a movement and mobility assessment of your client to identify abhorrent movement patterns.
4. Develop SMART Goals for a simulated client.

Reading(s)

Chapter 7: Client Intake and Assessment

Chapter 8: Static Assessments

Chapter 9: Movement Assessments

Chapter 10: Mobility Assessments

Assignment(s)

Ask a friend if you can perform a client intake and corrective exercise assessment. Using a code so as not to identify your friend complete the NASM Intake, PAR Q+, static and dynamic assessments. Submit these forms and your assessment of whether or not your "client" demonstrates any movement impairments and what you feel is causing them.

Week 4: Addressing from the Knee Down

Topic(s)

Corrective strategies for the foot and ankle Corrective strategies for the knee

Learning Objective(s)

2,3,4

Reading(s)

Chapter 11: Corrective Strategies for the Foot and Ankle

Chapter 12: Corrective Strategies for the Knee

Assignment(s)

Discussion: please watch this YouTube video <https://youtu.be/Eix7kwUbzrk> note that simply by changing the type of shoe for this client significantly reduced the amount of in toeing (femoral internal rotation from heel strike through toe off). Please describe what you think this client's static posture would look like and what muscles may be responsible for contributing to the internal rotation. What strengthening exercises would help reduce the in toeing and could be incorporated into the workout? Please respond to 2 of your peers' posts as well.

Assignment: please watch this YouTube video <https://youtu.be/UhA5cjJ0jn0> Describe what is happening and what are the structures most likely involved. Include both a static assessment and a mobility assessment.

Week 5: Lumbar Spine and Hips

Topic(s)

Correcting mobility issues in the lumbar spine and hips

Learning Objective(s)

2, 3, 4

Reading(s)

Chapter 13: Corrective Strategies for the Lumbo-Pelvic-Hip Complex.

Assignment(s)

Week 5 Discussion: Describe what you feel is responsible for the noted increase in lordosis found in obesity and third trimester pregnancy and what exercises can be performed to help reduce the progression of lumbar lordosis in these individuals. Note while weight loss seems the obvious answer for the obese client and delivery of the baby for the pregnant one focus solely on 4 principles for this assignment.

Week 6: Thoracic Spine and Upper Extremity

Topic(s)

- Improving mobility in the thoracic spine and shoulder girdle in order to improve upper extremity function.
- Improving wrist and elbow function

Learning Objective(s)

- Perform a static postural assessment in order to identify kyphosis, upper cross syndrome, forward head.
- Perform a mobility assessment to assess for scapular dyskinesis.
- Identify the pertinent anatomy within the thoracic spine, scapula, shoulder and upper extremity.

Reading(s)

Chapter 14: Corrective Strategies for the Thoracic Spine and Shoulder.

Chapter 15: Corrective Strategies for the Wrist and Elbow

Scapular Dyskinesis YouTube video <https://youtu.be/0wxvHW09DS0>

Assignment(s)

Discussion: student posture

Assignment: athlete with student posture

Week 7: Cervical Spine: Considerations for the Corrective Exercise Specialist

Topic(s)

- Cervical spine posture
- Cervical spine anatomy
- Influence of thoracic spine and scapular stabilizers on cervical spine

Learning Objective(s)

- Describe pertinent cervical anatomy.
- Describe common static postures which increase the stress on the cervical spine.
- Describe common abhorrent movement patterns involving the cervical, thoracic spine and the scapulae and upper extremity.

Reading(s)

Chapter 16: Corrective Strategies for the Cervical Spine.

Physio-pedia.com https://www.physio-pedia.com/Upper-Crossed_Syndrome

Snyder, J. "Closed Kinetic Chain Upper Extremity Stability Test". Available at <https://johnsnyderdpt.com/for-clinicians/functional-testing/closed-kinetic-chain-upper-extremity-stability-test/> Accessed 12/19/2022.

There are 2 videos for scapular dyskinesis one is just bilateral shoulder ABD <https://youtu.be/0wxvHW09DS0> which is pretty interesting, next one is during a wall push up <https://youtu.be/DykY65jpP3I> all of these are the same patient

Ullucci Cervical Spine anatomy YouTube video <https://youtu.be/UWYjdtXWPNO>

Assignment(s)

Week 7 Discussion

Week 7 Assignment

Week 8: Putting the Course into Practice

Topic(s)

- Selfcare Hydration and nutrition as a means of promoting and enhancing recovery to aid in goal achievement.
- Tools to assist the client in achieving goals.

Learning Objective(s)

1,2,3,4

Reading(s)

Chapter 17: Self-Care and Recovery.

Chapter 18: Real-World Application of Corrective Exercise Strategies

Assignment(s)

Week 8 discussion: readiness and recovery questionnaires

Final Project

Evaluation

Grading:

Evaluation Procedures	
Graded Items	Percent of Grade
Discussions	30
Assignments	50
Final Project	20
Total	100

Materials

Book Title: Various resources from the APUS Library & the Open Web are used. Please visit <http://apus.libguides.com/er.php> to locate the course eReserve.

Required Readings:

See Course Outline

Additional Resources:

In the Course Materials folder for each week, there are additional course articles, and up to date APA handouts.

In addition to the required course texts the following public domain websites are useful. Please abide by the university's academic honesty policy when using Internet sources as well. Note web site addresses are subject to change.

Site Name	Website URL/Address
The OWL at Purdue	http://owl.english.purdue.edu/
APA Style Homepage	http://www.apastyle.org/index.aspx

Course Guidelines

Academic Honesty & Personal Integrity

The University System supports and promotes academic honesty and personal integrity. Any form of academic dishonesty has no place in higher education. The University System does not tolerate dishonest efforts by its students. Students who are guilty of academic dishonesty can expect to be penalized. Any student who knowingly assists another student in dishonest behavior is equally responsible. An additional violation of the standards of academic honesty within a course may result in dismissal from the University System. [Click here for the full APUS policy.](#)

In addition to the [university's plagiarism policy](#), students who are found to have submitted materials plagiarized from any online source, such as Course Hero, etc., will be reported to both the Plagiarism Office and the Student Conduct Office with the possibility of [failing the course](#) and/or expulsion from APUS. Use of said materials is academic dishonesty and will not be tolerated.

Using Turn-It-In for Discussions

Some instructors may require students to submit their initial Discussion posts to Turnitin via the "Assignments" tool in our Brightspace classroom--please check the Discussion Guidelines (Course Overview& Introduction Content area) and/or an Announcement from your faculty to determine if this step is required for this course.

If this is a requirement in your class, before posting your initial Discussion, you must submit it in the assignment area in a Word file, so its originality can be checked by turnitin.com. Your similarity score will appear in the same place you submit your file. It can take up to 24 hours for a score to return, but usually, it is less than 30 minutes. Before you post your Discussion, make sure your similarity score is less than 15%. If it is greater than 15%, edit/rewrite your discussion, submit it again in the assignment area and check the %. Repeat this process until your similarity score is less 15%. Then post your Initial Discussion for the week.

Writing Expectations

Students please review forum and assignment rubrics prior to completing each course requirement. As you work with student athletes, other athletic/fitness related personnel, clinical and other situations, you will frequently encounter challenging learning and behavioral situations. The solutions you find to these challenges will often determine success at a personal and program level. Your experiences have led you to certain beliefs; however, these beliefs may not lead to the correct solution in any given circumstance. In simple terms, theory is what generates the practical application you apply to your job. It is theory that helps us analyze our opponent and make determinations on what they are going to do in the future, and it is theory that has been turned into technology that helps us increase quality of life, performance, and competitiveness. Understanding what experts recommend is one very important strategy for you to use. The commitment to apply key theory to your ideas enhances the likelihood that sound judgment drives solutions, not just feelings and beliefs. The application of theory can also help protect you in cases of liability questions.

All written submissions should be submitted in a font and page set-up that is compatible with APA Style (7th Ed.) formatting. It is recommended that students adhere to this consistent format and follow all rules of APA formatting –here are some basics:

- Typewritten in double-spaced format with a readable style (Arial or Times New Roman fonts are best) and submitted inside the electronic classroom as instructed by the assignment details (unless classroom access is not possible and other arrangements have been approved by the professor).
- Best font sizes: Arial or Times New Roman 12-point font.
- 1" margins all around (no additional indenting –except 1st line of each paragraph)
- Double-spaced throughout paper
- Appropriate APA-style formatted in-text citations and reference list
- Paper should be written in 3rd person –this means no personal opinions, no sentences with "I" "my" or other 1st person text. These are academic/scientific papers.

Citation and Reference Style

Attention Please: Students will follow the APA (7th Ed.). Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Late Assignment Policy

All dates and times posted are for U.S. Eastern Standard time. It is your responsibility to know/that translates to your time zone and to submit/complete Assignments, Discussions and tests per these posted deadlines. All assignment due dates are posted on the Assignments page.

Students are expected to submit assignments by the due dates listed in the classroom. Late assignments, including but not limited to Assignments, Discussions, posts and responses, quizzes, and exams, may or may not be accepted after the course end date. Submitting an assignment after the due date may result in a penalty of up to 10% of the grade per day late, not to exceed a maximum 50% of the grade. The amount of the penalty is at the faculty member's discretion. Faculty recognize that students have limited time and may be more flexible if potential delays are communicated ahead of time. The University Late Policy can be found in the [Student Handbook here](#).

*Doctoral and Programs with specialty accreditation may have different late policies.

**Students with DSA accommodations may have different late policies applied. For more information regarding our DSA services, please contact DSA@apus.edu.

Netiquette

Online universities promote the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and “flaming.” Such activity and the loss of good manners are not acceptable in a university setting – basic academic rules of good behavior and proper “Netiquette” must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the Forum of others.

Humor Note:

Despite the best of intentions, jokes and especially satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add “emoticons” to help alert your readers: ;-), :)

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

Communications

Student Communication

To reach the instructor, please communicate through the *MyClassroom* email function accessible from the *Classlist* of the Course Tools menu, where the instructor and students email addresses are listed, or via the Office 365 tool on the Course homepage.

- In emails to instructors, it's important to note the specific course in which you are enrolled. The name of the course is at the top center of all pages.
- Students and instructors communicate in Discussion posts and other learning activities.
- All interactions should follow APUS guidelines, as noted in the [Student Handbook](#), and maintain a professional, courteous tone.
- Students should review writing for spelling and grammar.
- [Tips on Using the Office 365 Email Tool](#)

Instructor Communication

The instructor will post announcements on communications preferences involving email and Instant Messaging and any changes in the class schedule or activities.

- Instructors will periodically post information on the expectations of students and will provide feedback on assignments, Discussion posts, quizzes, and exams.
- Instructors will generally acknowledge student communications within 24 hours and respond within 48 hours, except in unusual circumstances (e.g., illness).
- The APUS standard for grading of all assessments (assignments, Discussions, quizzes, exams) is five days or fewer from the due date.

- Final course grades are submitted by faculty no later than seven days after the end date of the course or the end of the extension period.
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University Policies

Consult the [Student Handbook](#) for processes and policies at APUS. Notable policies:

- [Drop/Withdrawal Policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)
- [Academic Dishonesty / Plagiarism](#)
- [Disability Accommodations](#)

- [Student Deadlines](#)
- [Video Conference Policy](#)

Mission

The [mission of American Public University System](#) is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

Minimum Technology Requirements

- Please consult the catalog for the minimum hardware and software required for [undergraduate](#) and [graduate](#) courses.
- Although students are encouraged to use the [Pulse mobile app](#) with any course, please note that not all course work can be completed via a mobile device.

Disclaimers

- Please note that course content – and, thus, the syllabus – may change between when a student registers for a course and when the course starts.
- Course content may vary from the syllabus' schedule to meet the syllabus' schedule to meet the needs of a particular group.