

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.

American Public University System

The Ultimate Advantage is an Educated Mind

**Department of Sports and Health Sciences
SPHS 507
Biomechanics
3 Credit Hours
8 weeks
Prerequisite(s): None**

Table of Contents

Instructor Information	Evaluation Procedures
Course Description	Grading Scale
Course Scope	Course Outline
Course Objectives	Policies
Course Delivery Method	Academic Services
Course Materials	

Instructor Information

Instructor:
Email:

[Table of Contents](#)

Course Description (Catalog)

SPHE 507 Biomechanics (3 hours)

This course provides a thorough introduction to biomechanical concepts of movement. The student will understand concepts of human motion and how internal and external forces affect human movement.

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.

[Table of Contents](#)

Course Scope

This course in Biomechanics will help the student understand the biomechanical concepts of human movement.

[Table of Contents](#)

Course Objectives

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

Each student will:

1. Analyze the categories of bones as to their sizes and shapes.
2. Synthesize the factors that contribute to joint range of motion and stability.
3. Discuss the considerations for human movement.
4. Explain the functional anatomy of the upper extremity.
5. Explain the functional anatomy of the lower extremity.
6. Apply the movements of the human body to a sport.
7. Synthesize linear kinematics with the application of human movement.
8. Synthesize Angular kinematics with the application of human movement.
9. Demonstrate the fundamental movement patterns using the correct terminology.
10. Apply Linear and Angular kinematics to a specific athlete.
11. Discuss the importance of scientific evidence with a specific athletic movement.

[Table of Contents](#)

Course Delivery Method

This course, [SPHE507](#) **Biomechanics** , delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. **Online assignments are due by Sunday evening** of

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.

the week as noted. The initial post for each forum assignment is required to be submitted by Thursday at midnight. The responses to others are to be submitted by midnight on Sunday. Late forum posts are not accepted. Assigned faculty will support the students throughout this eight-week course.

[Table of Contents](#)

Course Materials

Required Course Textbooks:

Book Number	Authors	Book Title	Publication Info	ISBN
SPHE507-0	Hamill, Joseph, Knutzen, Kathleen	Biomechanical Basis of Human Movement	Lippincott, Williams and Wilkens	0-7817-9128-6

Textbook in APA format:

Hamill, J & Knutzen, K. Biomechanical Basis of Human Movement. Lippincott, Williams and Wilkens (2010)
 ISBN: 0-7817-9128-6

Required Readings:

See Course Outline

Additional Resources:

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

Websites

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

[Table of Contents](#)

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.

Evaluation Procedures

Graded Assignment	Percent of Final Grade
Week 1 – Forum 1	1
- Forum 2	1
- Quiz 1	6
Week 2 - Forum 3	1
- Forum 4	1
- Quiz 2	6
- Topic Selection	1
Week 3 - Forum 5	1
- Forum 6	1
- Quiz 3	6
- Sources and Outline for Paper	2
Week 4 – Quiz 4	6
-Forum 7	1
-Forum 8	1
Week 5 - Forum 9	1
- Forum 10	1
- Quiz 5	6
- Description of Movement	5
Week 6 – Forum 11	1
- Forum 12	1
- Quiz 6	5
Week 7 – Final Paper	30
-Forum 13	1
- Forum 14	1
- Quiz 7	6
Week 8 – Forum 15	1
- Quiz 8	6

Total	100

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.

Table of Contents

8 – Week Course Outline

<u>Week</u>	<u>Topic(s)</u>	<u>Learning Objective(s)</u>	<u>Reading(s)</u>	<u>Assignment(s)</u>
1	Basic Terminology Skeletal Considerations for Movement	<u>1, 2</u>	Chapters 1 & 2 in Hamill and Knutzen	1) Forum 1 & 2 2) Quiz 1
2	Muscular Considerations for Movement Neurological Considerations for Movement	<u>3</u>	Chapter 3 & 4 in Hamill and Knutzen	1) Forum 3 & 4 2) Quiz 2 3) Topic Selection
3	Functional Anatomy of the Upper Extremity	<u>4, 11</u>	Chapter 5 in Hamill and Knutzen	1) Forum 5 & 6 2) Quiz 3 3) Sources and Outline for Paper
4	Functional Anatomy of the Lower Extremity	<u>5</u>	Chapter 6 in Hamill and Knutzen	1) Forum 7 & 8
5	Functional Anatomy of the Trunk	<u>6, 9</u>	Chapter 7 in Hamill and Knutzen	1) Forum 9 & 10 2) Quiz 4 3) Description of movement due
6	Linear Kinematics	<u>7</u>	Chapter 8 in Hamill and	1) Forum 11 & 12

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.

			Knuzten	2) Quiz 5
7	Angular Kinematics	<u>8</u>	Chapter 9 in Hamill and Knuzten	1) Final Paper Reminder 2) Forum 13 & 14
8	Linear Kinetics Angular Kinetics	<u>9,10,11</u>	Chapters 10 and 11 in Hamill and Knuzten	1) Forum 15 2) Final Paper

Please see the [Student Handbook](#) to reference the University's grading scale [Table of Contents](#)

Policies

Please see the [Student Handbook](#) to reference all University policies. Quick links to frequently asked question about policies are listed below.

- [Drop/Withdrawal Policy](#)
- [Plagiarism Policy](#)
- [Extension Process and Policy](#)
- [Disability Accommodations](#)

WRITING EXPECTATIONS

All written submissions should be submitted in a font and page set-up that is readable and neat. It is recommended that students try to adhere to a consistent format, which is described below.

- Typewritten in double-spaced format with a readable style and font and submitted inside the electronic classroom (unless classroom access is not possible and other arrangements have been approved by the professor).
- Arial 11 or 12-point font or Times New Roman styles.
- Page margins Top, Bottom, Left Side and Right Side = 1 inch, with reasonable accommodation made for special situations and online submission variances.

CITATION AND REFERENCE STYLE

Attention Please: Students will follow the [APA Style Manual, 6th Edition](#) 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 used in the [APA Style Manual, 6th Edition](#).

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.

LATE ASSIGNMENTS

Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. As adults, students, and working professionals I understand you must manage competing demands on your time. Should you need additional time to complete an assignment please contact me before the due date so we can discuss the situation and determine an acceptable resolution. Routine submission of late assignments is unacceptable and may result in points deducted from your final course grade.

NETIQUETTE

Online universities promote the advance of knowledge through positive and constructive debate--both inside and outside the classroom. Discussions 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 fun and excitement of learning that does not include descent to personal attacks, or student attempts to stifle the discussion of others.

- **Technology Limitations:** While you should feel free to explore the full-range of creative composition in your formal papers, keep e-mail layouts simple. The Educator classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color-coding or other visual effects will not translate in your e-mail messages.
- **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.

[Table of Contents](#)

Academic Services

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search engines on the open Web. In addition, the Online Library provides access to special learning resources, which the

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.

University has contracted to assist with your studies. Questions can be directed to librarian@apus.edu.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors' publication, and services to search and borrow research books and articles from other libraries.
- **Electronic Books:** You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- **Electronic Journals:** The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Turnitin.com:** Turnitin.com is a tool to improve student research skills that also detect plagiarism. Turnitin.com provides resources on developing topics and assignments that encourage and guide students in producing papers that are intellectually honest, original in thought, and clear in expression. This tool helps ensure a culture of adherence to the University's standards for intellectual honesty. Turnitin.com also reviews students' papers for matches with Internet materials and with thousands of student papers in its database, and returns an Originality Report to instructors and/or students.
- **Tutor.com:** Students have access to 10 free hours of tutoring service per year. **Tutor.com** is an award-winning online homework help and learning service that connects students to a certified tutor for one-on-one help. Get help with homework, studying, projects, essay writing, and test prep in every subject, including algebra, statistics, chemistry, physics, social studies, and English. There are thousands of academic and career services resources—worksheets, practice problems, videos in every subject, as well as financial literacy tips. They are available 24/7 so you can access them whenever you need extra help. **Tutor.com** can be accessed through the Online Library Tutorial Center link.

[Table of Contents](#)

Request a Library Guide for your course

(<http://apus.libguides.com/index.php>)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. These are specially tailored for academic research at APUS:

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.

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name or navigate by school.
- Course Lib-Guides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g. SPHE319) or class name.

If a guide you need isn't available yet, let us know by emailing the APUS Library: librarian@apus.edu

[Table of Contents](#)

Turnitin.com

Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. Typically the course professor will establish a Turnitin.com access code for his/her classes. If the code has not been established, those who wish to use Turnitin.com may ask their professor to establish the code. Students will not be required in this class to use turnitin due to all assignments being randomly chosen by your instructor, as they will submit randomly to turnitin for you.

Good luck this semester☺