**HPW 455: Scientific Principles of Strength, Conditioning & Exercise Technique**

**Instructor**: Kevin Kirschbaum MS, CSCS

Office: Science Building D 140

Phone: 715-570-2248

Email: kkirschb@uwsp.edu

**Required Text and Material:**

**NSCA, Essentials of Strength and Conditioning 4th Edition**

NSCA The Basics of Strength & Conditioning Manual (PDF)

**Lecture: Monday, Wednesday & Friday 12:00 PM – 12:50PM Room: MCCH 033**

**Credits: 3**

**Course Description:** Students will begin in the classroom. A review of anatomy and physiology (muscular, neuromuscular, bone and connective tissue, cardiopulmonary); biomechanics; bioenergetics and metabolism, neuroendocrine physiology; physiological adaptations; anatomical, physiological and biomechanical differences of athletes; psychological techniques. Bi-weekly the class will be conducted in the Champions Hall Fitness Center, providing a coaching and teaching model for foundational exercises used in strength and conditioning. The utility and application of exercise progression from novice to complex movements, basic biomechanical concepts and teaching methods. Students will coach their classmates through movements identifying correct technique and progressions through coaching cues and constructive feedback. Students will research certifications through National Strength and Conditioning Association (NSCA), National Academy of Sports Medicine (NASM), and/or American College of Sport Medicine (ACSM). The course will prepare you to sit for Certified Strength and Conditioning Specialist, CSCS, Examination.

**Schedule**: Follow Canvas Weekly Schedule

**Practical/Applied:** Basics of Strength Training and Foundations of Coaching Lifts

Marshfield Clinic Champions Hall Fitness Center and Multi Activity Center

**Wednesday Movement Labs**

1. Bench Press/RDL
2. Front/Back Squat
3. High Pull from Hang Position/BB Bent over Row
4. Shoulder Press/Push Press/ Push Jerk
5. Deadlift/Pulls
6. Clean Progressions/Variations
7. Snatch Progressions/Variations
8. Rotation/Anti Rotation/Core Movements/Carries

 **Demo Drills Assignment – Coach Us**

1. Identify Muscles Used in Movement
2. Teach/Coach us how to do the Movement

 a. Take in consideration:

i. Starting Position
ii. Eccentric, Isometric and Concentric Phases
iii. Ending Position

3. Regressions/Progressions

a. Using different implements, bodyweight, etc

Practical/Applied Competencies:

* Understand the anatomical, physiological, and safety concepts and terms related to the squat, bench press, push press, deadlift, power clean, power snatch, accessory lifts and movements in the Basics of Strength and Conditioning Manual and Foundations of Coaching Lifts
* Plyometric, Speed and Agility Drills
* Understand the utility and application of these movements
* Instruct lifters in proper exercise technique and use of progressions
* Identify technique errors in the performance of the movements
* Use and learn coaching cues to improve lifters’ performance of the movements

**Letter Grade Assignment:**

**Attendance and Participation**: For optimal learning to occur in this course you will need to attend required classes and participate. Therefore, please be prepared to engage in weekly class sessions, ask questions, share experiences, contribute to discussion, participate with an open mind, and challenge yourself. For every class missed after one, you will lose 10 points.

**Attendance/In Class Assignments 120 Points**

**Study Questions 120 Points**

**Application Questions 120 Points**

**Demo Drills 60 Points**

**Personal Periodization Plan 60 Points**

**Chapter Tests 240 Points**

**Mid Term Exam 80 Points**

**Final Exam 100 Points**

**Total 900 Points**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   |   | **A** | ≥93%  | **A-**  | 92.9-90%  |
| **B+**  | 89.9-87%  | **B**  | 86.9-83%  | **B-**  | 82.9-80%  |
| **C+**  | 79.9-77%  | **C**  | 76.9-73%  | **C-**  | 72.9-70%  |
| **D+**  | 69.9-67%  | **D**  | 66.9-60%  | **F**  | <60%  |

**Technology Support**

[**IT Service Desk**](https://www.uwsp.edu/infotech/Pages/ServiceDesk/default.aspx) - Students should direct all UWSP technology related questions and problems to the IT Service Desk. Use this link to access the IT Service Desk. You can also access the IT Service Desk by calling 715-346-4357 (HELP) or emailing techhelp@uwsp.edu.

[**Tech Essentials Training**](https://www.uwsp.edu/tlc/Pages/TechEssentials.aspx) – If you would like individual help on frequently used programs at UWSP (accesSPoint, Canvas, Office 365, Zoom, etc.) you can schedule an appointment using your Navigate app or emailing tlctutor@uwsp.edu. Training is available via Zoom or in-person.

[**Office 2016/Office 365 (O365)/OneDrive**](https://www.uwsp.edu/infotech/Pages/SoftwareSupport/Office-365-OneDrive.aspx) - As a UWSP student you get access to these three Microsoft Suites. Use the link to learn more and start using the programs.

[**Zoom**](https://www.uwsp.edu/infotech/Pages/Tutorials/Zoom/Zoom.aspx)**-**Zoom is a synchronous web meeting tool. Click the link to access UWSP Zoom Support resources.

[**UWSP Accessibility Policy**](https://www.uwsp.edu/accessibility/Pages/default.aspx) - Use this link to access the UWSP Information and Communication Technology Accessibility Policy.

[**Learning Technology Privacy and Accessibility Statements**](https://www.uwsp.edu/online/Pages/Privacy-and-Accessibility-Links.aspx) - This website provides links to the Terms of Service, Privacy Policies, and Accessibility Policies for Canvas, D2L Brightspace, Blackboard Collaborate Ultra, and Kaltura.

[**UWSP Information Security Office**](https://www.uwsp.edu/infosecurity/Pages/default.aspx) - this website provides information regarding information security.

**You can protect your data and privacy by taking a few simple precautionary steps.**

1. Use different usernames and passwords for each service you use
2. Do not use your UWSP username and password for any other services
3. Use secure versions of websites whenever possible (HTTPS instead of HTTP)
4. Have updated antivirus software installed on your devices

**ChatGPT and AI**

One goal of this course is for you to work on developing the discipline-specific writing skills that you will need to be successful as a professional in this field. I want to acknowledge that recent buzz about ChatGPT and other generative AI tools poses some interesting questions about the need for developing these skills, and how such tools can be used in higher education. Given that this technology is still in its infancy and that my goal is for you to develop your skills as writers, the unauthorized use of ChatGPT or other AI writing tools is not permitted in this course. Students found to be using such tools will be considered as engaging in conduct aimed at making false representations of a student's academic performance and will be subject to disciplinary action as defined in the [UWSP Academic Misconduct Policies](https://www3.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf).

**Emergency Procedures**

**Medical emergency - call 9-1-1** or use campus phone [list location in room or nearest your classroom]. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

**Tornado warning -** **proceed to the lowest level interior room** without window exposure at [list primary location for shelter closest to classroom,].   See [UWSP Evacuation Floor Plans](http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx) for floor plans showing severe weather shelters on campus.  Avoid wide-span structures (gyms, pools or large classrooms).

**Fire alarm -** **evacuate the building** in a calm manner. Meet at [state logical location to meet 200 yards away from building]. Notify instructor or emergency response personnel of any missing individuals.

**Active Shooter – RUN. HIDE. FIGHT.** If trapped, hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so.  Follow instructions of emergency responders.

See UW-Stevens Point Emergency Procedures at [UW-Stevens Point Emergency Procedures](https://www3.uwsp.edu/emergency/Pages/emergency-procedures.aspx) for details on all emergency response at UW-Stevens Point

# **Online Mental Health Resources**

The [UWSP Counseling Center](https://www.uwsp.edu/counseling/Pages/default.aspx) offers several mental health resources for students, please see the resources below.

* [Mantra Health](https://app.mantrahealth.com/register): Teletherapy & Telepsychiatry
	+ Diverse therapists
	+ After-hours availability
	+ Medication evaluations & prescriptions
* [You@UWSP:](https://you.uwsp.edu/) Self-help & Well-being Platform
* Didi Hirsch Mental Health Services: 24/7 Mental Health Support
	+ Call or text: 888-531-2142
	+ [Start a Chat Session](https://na0messaging.icarol.com/ConsumerRegistration.aspx?org=2036&pid=813&cc=en-US)
	+ Crisis care is available

# Academic Support

[UWSP Online-Online Student Support](https://www.uwsp.edu/online/Pages/Student-Support.aspx) - The UWSP Online-Student Support page is the go-to resource for online students. On the page you will find technology instruction sheets, support videos, and more.

[UWSP Online Student Readiness Self-Assessment](https://www.uwsp.edu/online/Pages/Online%20Student%20Orientation.aspx) - This self-paced tool is a great starting point for online students who want to assess and build their online learning skills. Use this link to access the tool.

[UWSP Office of the Dean of Students](https://www.uwsp.edu/dos/Pages/default.aspx) - The Office of the Dean of Students provides direct care to students who may need additional support, connection to resources, or help navigating questions or concerns.

[Off Campus Access to Library Resources](https://common-cartridge-viewer.netlify.app/%24WIKI_REFERENCE%24/pages/off-campus-access-to-library-resources) - Students can access library journals, databases, ebooks, and streaming videos from off campus.

[Text Rental Information for Online Students](https://uwsp.bncollege.com/shop/uw-stevens/page/textbook-rentals) - Visit the UWSP Bookstore text rental site for more information.

[Tutoring-Learning Center (TLC) at UWSP](https://www.uwsp.edu/tlc/Pages/default.aspx)- The TLC provides multiple services forall UWSP students – Stevens Point, Marshfield, Wausau, and online. Tutoring offices are located on the Stevens Point, Wausau, and Marshfield campuses and many services are also available online. Services include writing support, STEM tutoring, world languages tutoring, academic coaching, independent writing courses, academic success courses, Foundations of Reading Test (FoRT) preparation, technology essentials training, and English as a Second Language (ESL) support.

[Disability Resource Center (DRC)](https://www.uwsp.edu/drc) - If you are a student who requires accommodations due to a disability, please inform the instructor and contact the Disability Resource Center by calling (715) 346-3365 or emailing drc@uwsp.edu.

[Academic and Career Advising Center (ACAC)](https://www.uwsp.edu/ACAC/Pages/default.aspx) - ACAC can provide students support with course registration, major and career exploration, career development, resumes, job searches and more**.**