

2024-2025 School Year

Course Name: Foundations of Sports Conditioning & Exercise Science-William D. Ford Career

Technical Center

CIP Number: 51.0000 **PSN:** 16754

Course Code:

V1770 Foundations of Sports Medicine and Exercise Science (1 yr. 3 cr.)

V1770M Foundations of Sports Medicine and Exercise Science (plus Algebra 2 or Math Skills)

1 yr. 2cr

V1775 Foundations of Sports Medicine and Exercise Science 2 (1 yr. 3 cr.)

Location: William D Ford CTC building, Room 125

Phone Number: (734) 419-2100 **Fax Number:** (734) 595-2127

Instructor: Coming soon! Email: Coming soon! Web Site: www.wwcsd.net Teaching

Assistant: Jamie Kittle Email: kittlej@wwcsd.net

Prerequisites: None

Class: This class is a one year course. A second year may be allowed for students who maintain a 80% on tests and exhibit a knowledge that will allow them to participate in work based learning. All second year students will be required to complete work based learning in a Sports Medicine or Exercise Science field.

Credit: This class is valued as 3.0 credits over the course of one year. Successful completion of this one-year CTE program may be counted as any of the following:

· senior year math-related credit

· visual, performing and applied arts credit requirement

· 2nd year world language credit (counselor determination)

 \cdot 3rd year science credit (counselor determination)

AM Shift Class: Monday-Friday 7:25 am to 10:05 am Instruction begins at 7:30 am

PM Shift Class: Monday-Friday 11:10 am-1:50 pm Instruction begins at 11:15 am

Textbooks and Instructional Material:

Required Textbook:

At this time, we will be utilizing Google classroom and various resources. We may utilize two textbooks. They are:

1. Fundamentals of Anatomy and Physiology by Rizzo 4th Ed. w/ workbook and mindtap online supplement. 2. Sports Medicine Essentials: Core Concepts in Athletic Training & Fitness Instruction by Clover 3rd Ed. w/ workbook

Required Material:

- 1. 3" 3-Ring binder Page 1
- 2. Lined paper
- 3. Binder dividers with tabs (6) minimum

Online Instruction:

Google Classroom:

- a) You will receive an email inviting you to "join ""
- -Open the email and click "Join"
- B) If not:
- 1. Go to Google, click on your "Waffle", or "Windowpane"
- 2. Click on the Google Classroom icon
- 3. Under ", Click "Join"

Course Description:

Students enrolled in the Foundations of Sports Medicine & Exercise Science Program will cover topics that include Human Anatomy, Physiology, Kinesiology, Biomechanics, athletic injuries, rehabilitation and therapeutic modalities, Nutrition, Bioenergetics, CPR/First Aid/AED certification, Exercise & Fitness screening, Exercise Prescription, and Exercise Program Development. Laboratory hands-on applications will help to reinforce the knowledge and skills taught in the lectures. This course will prepare students for entry-level positions in therapy clinics and the fitness industry.

This CTE course will also provide students with a foundation to pursue post-secondary degrees and professional certifications in the athletic and health-related fields (athletic trainer, physical therapy, occupational therapy, medicine, nutrition, exercise physiology, and psychology. The course will explore the science of human health by designing a systematic approach learning body structures, their functions and the concept of therapeutic intervention of athletic injuries and increasing human performance in sports. Students will also learn various aspects of fitness training including resistance training, body composition and nutrition, flexibility, agility, and more. Students will be able to design, implement, modify, track and update fitness training programs based on individual needs.

Year 1 Sports Medicine & Exercise Science-Course Goals and Objectives Standards:

Course Content (subject to change):

- Unit 1 Safety Training & Classroom Orientation
- Unit 2 CPR/First Aid/AED/Bloodborne pathogens
- Unit 3 Foundations in Sports medicine
- Unit 4 Anatomical positions and movement
- Unit 5- Legal and ethical considerations
- Unit 6 Skeletal anatomy
- Unit 7 Muscular anatomy
- Unit 8 Common athletic injuries
- Unit 9 Healing phases of injuries
- Unit 10 Rehabilitation phases

- Unit 11 Injury phases and rehabilitation goals Page 2 Unit 12 Nutrition,
 Supplementation, PED usage in sports
- Unit 13 Injury treatment to common sports injuries (shoulder, elbow, wrist and hand, hip, knee and foot and ankle, concussion)
- Unit 14 Environmental conditions
- Unit 15- Foundational exercise movements
- Unit 16-Fitness screening
- Unit 17- Program design for resistance training
- Unit 18- Program design for aerobic exercise
- Unit 19- Speed and Agility design
- Unit 20- Plyometric training
- Unit 21-Recovery tools for athletes
- Certifications, Exam Prep & Career Readiness

Year 2 Sports Medicine & Exercise Science-Course Goals and Objectives

Standards: Year 1 information as instructor indicated throughout the school year. You are expected to find a job shadow of some type. See Dr. Davis

Unit 1: Body Systems Function and Structure

Unit 2: Biomechanics of Resistance training

Unit 3: Bioenergetics of Training

Unit 4: Endocrinology and response to training

Unit 5: Anaerobic training

Unit 6: Aerobic training

Unit 7: Impact of sex and age on training

Unit 8: Psychology

Unit 9: Nutrition

Unit 10: PEDs

Unit 11: Test selection/administration/interpretation

Unit 12: Warm-up/Flexibility

Unit 13: Techniques of exercise

Unit 14: Program design

Unit 15: Plyometrics

Unit 16: Speed and agility

Unit 17: Periodization principles

Unit 18: Rehabilitation

Unit 19: Record keeping and documentation

Unit 20: Physical diagnosis and alternative taping techniques

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CORE CURRICULUM STANDARDS:

SEMESTER 1 SEMESTER 2

Al: Explain & implement infection control

practices and procedures

function to conduct health care role

C1: Utilize knowledge of human structure and

A2: Demonstrate personal safety practices **C2:** Utilize knowledge of diseases and disorders to conduct health care role

A3: Use techniques to ensure environmental C3: Explain systems theory as it applies to the safety healthcare environment A4: Identify and apply strategies to mitigate C4: Explain the concept of system change as it common safety hazards/ protocols applies to the healthcare environment A5: Describe & promote healthy behaviors C5: Understand the existing and potential hazards to clients, coworkers, and self A6: Utilize emergency procedures and protocols C6: Identify and explain key systems of the health care delivery system A7: Obtain CPR/First Aid/AED certification C7: Display behaviors and practices that meet the expectation for employment in health care professions A8: Describe and follow legal and ethical C8: Communicate with patients and colleagues boundaries in health care delivery using appropriate medical terminology A9: Describe and follow ethical practice as it applies to health care delivery A10: Explain cultural, social, and ethnic diversity as it applies to health care delivery B1: Employ communication strategies used in the delivery of quality health care B2: Describe and actively practice team member participation B3: Describe legal implications affecting health care workers **B4:** Demonstrate a knowledge of the math concepts important in health care professions

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Leadership/CTSO:

problems

All students will apply their knowledge and leadership skills through Future Healthcare Professionals of America (HOSA) or SkillsUSA competitions. The goal of these organizations is for students to develop workplace competencies, such as teamwork, leadership, communication, critical thinking and academic proficiency. Leadership skills are fostered by encouraging students to participate in chapter planning and decision making, as well as run for chapter elected positions. Students may also participate in classroom, as well event-specific regional competitions with other Career Tech Centers.

Criteria for Evaluation/Grading Policy: Grading Framework:

and use those skills to solve medical math

- 1. Summative Assessments 70% (tests/quizzes/projects)
- 2. Formative assessments 20% (Classwork/Homework)

You will be evaluated on the following as well: Communication, Professionalism, Employability

3. Classroom Binder 10%

Grade Distribution:

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

E = 0 - 59%

Homework/Paperwork:

Homework may be assigned. It will be due upon the assigned due date. If a situation arises that the student does not complete their assignment they will be required to complete it within 5 days of returning to school. Work must be completed to receive a grade. Work turned in past this deadline will not be accepted, and you will receive a zero for that assignment.

Extra Help:

The Instructor will be available for extra help. Feel free to schedule a time that's convenient for both you and your instructor. This could possibly be before or after school. Test/Quizzes may be read aloud and extended time may be permitted under certain circumstances. Seating arrangements may be adjusted based on student needs.

Certificates:

Upon meeting the criteria set forth by the teacher, a student may earn the following certificates for: NASM CPT-Personal Trainer

- 1. Final Grade of 80% or better in summative assessments is required to sit for the above examinations
- 2. Only Seniors are eligible for the above certifications due to industry standards for both age and high school diploma requirements.

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Credentials:

All students in this class have the opportunity to gain CPR, First Aid, AED certification. Towards the end of the second semester, all students will have an opportunity to take the Sports Medicine Precision Exams. If a student meets the minimum requirements and criteria, a certificate will be awarded.

Employability:

Attendance is crucial. One cannot learn how to become a medical professional without showing up. Also, the class is based around teamwork, and when you're not present you only hurt the team. Students are expected to be in class. Your language is a large part of your employability. There will be no foul language, the use of profanity or racial slurs in this classroom. We will practice what is expected in the workforce. (Maintaining professionalism, respect for others and how we speak and conduct ourselves)

Performance:

Each virtual class day is worth one-half of the student's weekly grade. This is recorded by the student's attendance, participation and completion of assignments. Performance and employability measure all skills. The student must be a team player, use proper language, be on time, work steadily and efficiently, respect others and their property, etc.

Absences: As we are a career technical center, we will learn about the importance of showing up to work/class. Think of this course as your job. You will be given a bank of ("PTO-personal time off"). This will include 1 week of absences (5 days per semester). These days will not count against you and should be used for sick days, vacation with parents, doctor's appointments, etc. You will need to contact your instructor prior to the absence with an explanation. This can occur by phone or e-mail.

<u>Examples of absences:</u> illness and/or hospitalization, Illness of other family members or death in family, Court appointments, Medical or dental appointments, Absences due to school-related activities, where school or classes are missed (This includes athletic events, band competitions, academic competitions, field trips, or other special school approved events.)

If extenuating circumstances result in a student absence, the school administration will consult with parents before determining if such circumstances define proper cause.

Limit on Total Absences

The total number of absences per semester is 5. (In or out of school suspension are not included in the total). The following procedures will be followed:

<u>For every absence</u> – an email will be sent to the parent or guardian

Truancy

Truancy is being absent from class or classes, or any assignment without permission. Regardless of the intent, the student who is truant receives an E for the class work missed and may not make it up unless there is prior approval by the instructor.

Tardiness

Tardiness is defined as not being in the room at the assigned time. A student will be considered tardy to class if he/she is in the classroom within 15 minutes after the designated time. After 15 minutes the student will be considered absent for that class hour. Students who arrive late due to busing will not be considered tardy. Students with driving/riding privileges, who arrive late, will be counted as tardy if late. Page 6

Notes:

- 1. Students are expected to email the instructor before class starts if they are going to be absent. This is professional and helps the instructor prepare for class since there is a lot of teamwork and partnering in the building process. This is also expected in the job market and will teach the student the importance of proper communication with their employer.
- 2. It is the student's responsibility to find out what they have missed while absent.

Work-Based Learning:

Work-based learning is a valuable experience in which every student in Career and Technical Education is required to participate. All students will be given opportunities to attend a minimum of one field experience each school year. Those students who do not attend the scheduled experience(s) will be

required to find a site where they will spend a minimum of one class period in a business related to their program of study. The student will be required to get the teacher's signed permission, the parent/guardian's signed permission, fill out a training agreement to be signed by the site supervisor, and provide their own transportation to and from the site. Upon completion of the field experience, the students will turn in a question and answer assignment provided by the teacher regarding the experience.

Class Rules:

- 1. **No cell phones or ear buds will be allowed during class at any time.** Leave your phone in your bag. If your phone is visible, you will be required to place it in the locker until class is over. 2. Be attentive and listen to instructions.
- 3. Respect your teacher, yourself and your fellow students.
- 4. Be involved. ASK questions and participate in lab activities.
- 5. Exercise has inherent risks even with the best instruction. If you do not follow instructions, the risks of injuring yourself or even worse someone else increases dramatically.
- 6. No use of any equipment until it has been demonstrated and an instructor checks you off. 7. Appropriate clothing is required for each class. Closed toe athletic shoes and gym attire are required as we will be performing movement exercises daily and have a need to be able to access various body parts (ankles, knees, wrists, shoulders, elbows, neck, back, etc. Be dressed appropriately prior to the start of class. As this is a health class, you will be working on and having other students work on you through various modalities. We touch appropriate body parts to: tape, stretch, examine, use therapy modalities, etc. You are expected to participate fully.
- 8. **NO FOOD or BEVERAGES are allowed in the classroom.** (the ONLY exception is a water bottle that can be closed without a twist on cap)

Miscellaneous Rules for General Classroom and Exercise area

- Wear proper exercise attire as established by the teacher and the school policy (e.g., clean shirt,shorts,socks,athletic shoes).
- Warm up prior to working out. General and specific warm-up methods are preferred.
- Always use collars on bars to prevent the weights from sliding off.

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- Use capable spotters when doing certain free weights exercises.
- No student-athlete trains on their own during class. Student-athletes must be in a group or with a partner.
- Clean equipment after each use using prescribed weight room cleaner.
- Lift using proper technique. Use appropriate weights that enable correct performance of the exercise.
- Only use bumper plates on platforms.
- Do not drop bars or weights, and do not lean or place weights against or on equipment or benches.
- Keep chalk use to a minimum in the designated areas. Clean and sweep up the area after use.
 Load and remove weights from bars evenly so the bar will not ip.
- Remove all weights from bars, place collars on bars, and restack weights on proper weight horns when
 exercise is completed. Leave the weight room in better shape than you found it.
- Keep the facility clutter free, and keep weights off the floor.
- Report broken or damaged equipment to the teacher.
- Be respectful to the teacher and classmates.
- Do not prop open doors to the weight room.

- Return workout sheets to the proper folder or file at the end of class.
- Advise the teacher of injuries when arriving to class or any injuries sustained during class.
- Know where the emergency action plans are posted, and refer to them when necessary.
 Be dressed on time for class.
- A shirt (no cut offs or sleeveless), athletic shoes, socks, proper shorts, or other appropriate athletic attire is required for class and training. Students must abide by this dress code for class. Bring Proper materials to class if needed (strength manual, workout sheets, calculators, etc.). Log all exercises, sets repetitions, and weights on the workout sheets.
- Remove all jewelry,watches, loose necklaces, earrings, and bracelets before coming into the facility. Lock valuable and personal belongings in a locker or bring them to the weight room for storage. Cell phone use is PROHIBITED during class per school policy. Cell phones, headphones, earbuds, and so on are NOT allowed when lifting free weights
- No objectionable music.
- No food or drink is allowed in the facility. Exceptions may be plastic water bottles approved by the teacher.
- No bullying, horseplay, unsafe activity, profanity, or offensive language.
- Use only equipment that the teacher has demonstrated or approved for use.
- Submit medical excuses or absent-from-class notes. Attend a make-up session arranged with the teacher.
- No leaving the facility without the teacher's permission.
- Dismissal at the end of class will be given by the teacher.
- Remain in the classroom until the end-of-class bell rings.

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PLEASE RETURN THIS FORM:

Communication is essential for success and support in this class. Please supply your best contact information below. If your information changes, please feel free to contact me or send it in with your student. Thank you for your assistance.

Student Contact Information: Name:		
Cell phone:	_ Texting permission: Y OR N (please circle)	
Email Address:		

Parent Contact Information:

Cell phone:	_ Texting permission: Y OR N	(please circle)
Email Address:		
I have also read, and understan that I follow all class and school accountable for my actions.	_	_
Student signature		
Print student name	Date	
I have read, and understand, th my student to participate in all	•	
Parent/guardian signature:		_
Print parent/guardian name		_ Date:

Please feel free to reach out to me with any questions or concerns.

