



# UCONN PHYSICS SYLLABUS - 2ND QUARTER

November 06, 2023 - January 19, 2024



## Unit 7: Momentum (Linear)

Textbook: Physics - James Walker (AP-edition)

(~2.0 weeks)

Required reading is: Chap 9, pages 254-285

Recommended videos: (Apologies as some have commercials, I have not edited the YouTube videos... yet)

1. [https://www.youtube.com/watch?v=Y-QOfc2XqOk&list=PL8dPuuaLjXtN0ge7yDk\\_UA0ldZJdhwkoV&index=11](https://www.youtube.com/watch?v=Y-QOfc2XqOk&list=PL8dPuuaLjXtN0ge7yDk_UA0ldZJdhwkoV&index=11) (9 min - Linear Momentum)
2. [https://www.youtube.com/watch/?v=ph48Xwj\\_eS8](https://www.youtube.com/watch/?v=ph48Xwj_eS8) (9 min Bozeman Sci Impulse)
3. <https://www.youtube.com/watch?v=6Sp4W2DS47E> (17 min conservation of momentum)
4. <https://www.youtube.com/watch?v=8OB8eIPgEkQ> (14 min Elastic vs. Inelastic Collisions Khan Academy)
5. <https://www.youtube.com/watch?v=8ko3qy9vgLQ> (6 min Bozeman Elastic vs. inelastic collisions)
6. <https://www.youtube.com/watch?v=ayv0MoCgtlk> ( 8.5 min Bozeman Center of Mass intro)
7. <https://www.youtube.com/watch?v=inAOV2d4P10> (4.75 min Bozeman Center of Mass Hang test)
8. <https://www.youtube.com/watch?v=2uszSnvzBEU> (13 min Khan Academy Center of Mass Problem Solve)

### Assignments:

#### Homework & Classroom work:

	<u>Date Due</u>	<u>Points</u>
Wkst I Elastic/Inelastic Collisions	<u>12-01-23</u>	<u>45 pts</u>
Wkst II Momentum & Impulse	<u>12-04-23</u>	<u>24 pts</u>
Wkst III Momentum & Collisions	<u>12-06-23</u>	<u>66 pts</u>
Wkst IV Collisions & Center of Mass	<u>12-07-23</u>	<u>24 pts</u>
Wkst V Two Dimensional momentum	<u>12-12-23</u>	<u>30 pts</u>
Lab: TBD	<u>N/A</u>	<u>- pts</u>
Quiz: Form A, B, C, D	<u>12-13-23</u>	<u>40 pts</u>
Test: Form A, B, C, D,	<u>12-15-23</u>	<u>70 pts</u>