

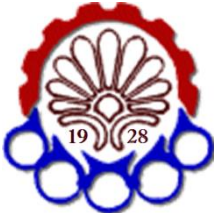
**Course:**

**General Physics II**

**Lecturer:**

**Hamidreza Habibiyan**

**Email:** [habibiyan@aut.ac.ir](mailto:habibiyan@aut.ac.ir)

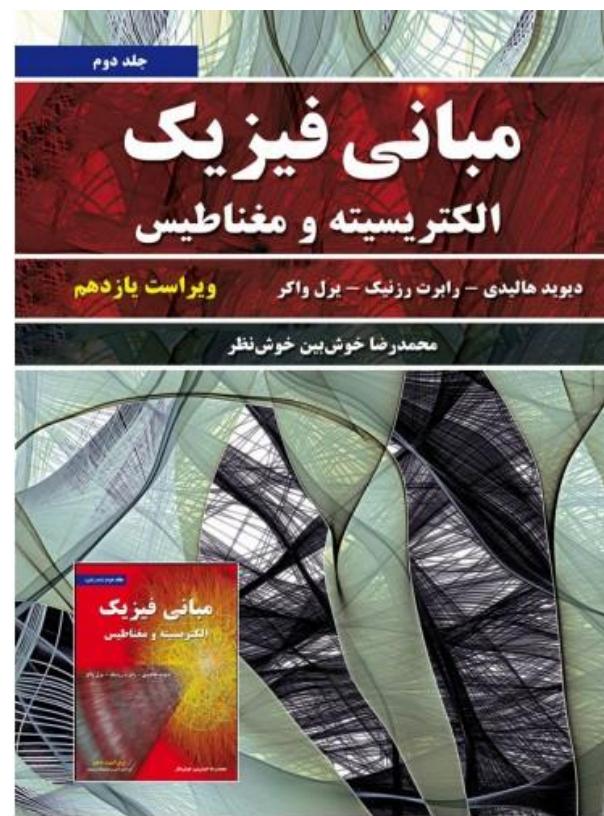
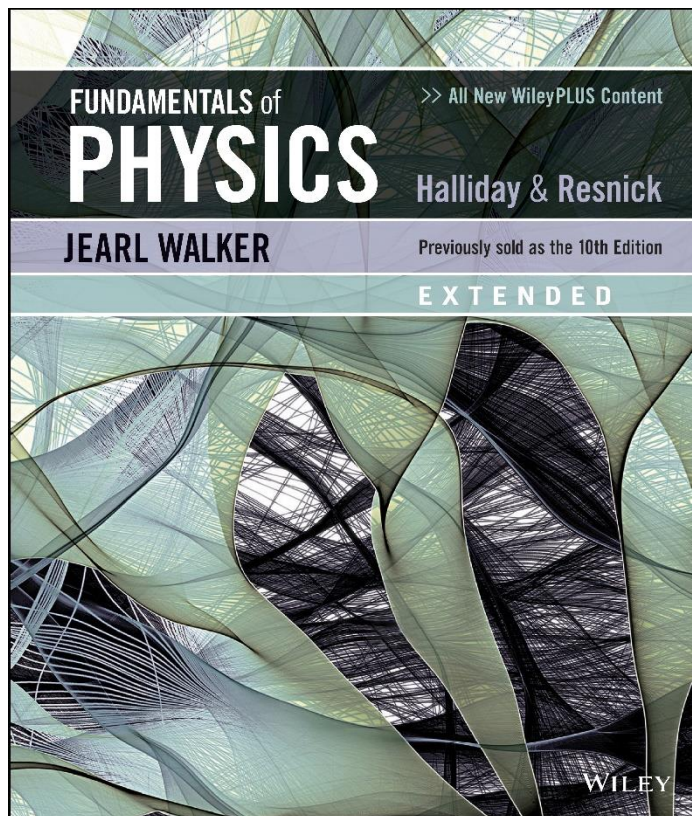


## Syllabus

- **CH01** Coulomb's Law
- **CH02** Electric Fields
- **CH03** Gauss' Law
- **CH04** Electric Potential
- **CH05** Capacitance
- **CH06** Current and Resistance
- **CH07** Circuits
- **CH08** Magnetic Fields
- **CH09** Magnetic Fields Due to Currents
- **CH10** Induction and Inductance

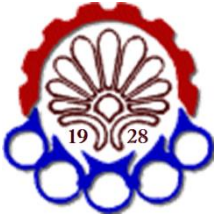


## Course Textbook

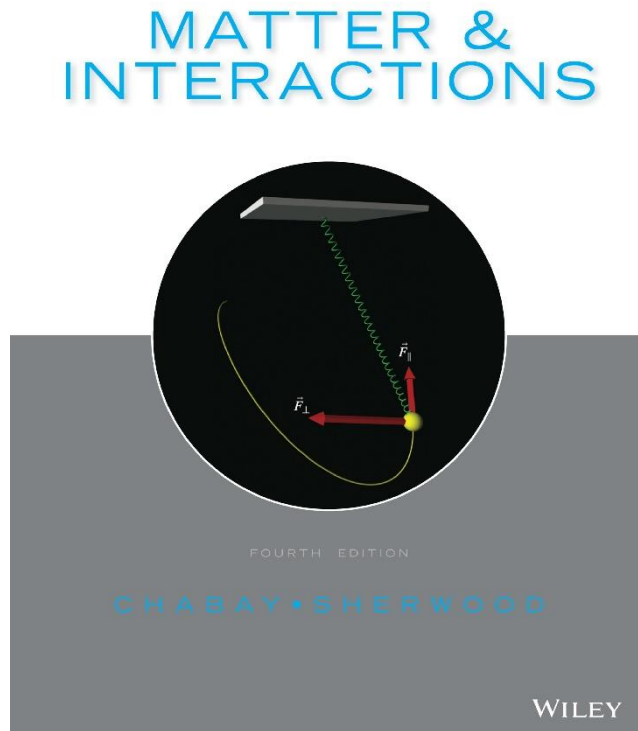


- Halliday & Resnick/Jearl Walker, **Fundamentals of Physics**, 11<sup>th</sup> Edition, John Wiley & Sons, 2018.

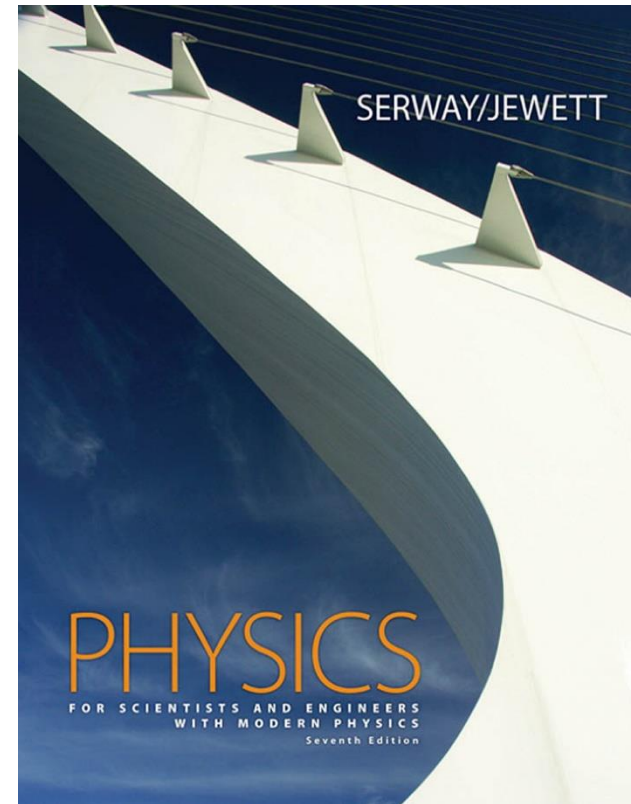
❖ **مبانی فیزیک، جلد دوم**، ترجمه محمد رضا خوش بین خوش نظر، ویراست یازدهم، نیاز دانش



## Additional Supportive Books

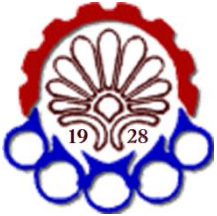


- Ruth W. Chabay & Bruce A. Sherwood, **Matter and Interactions**, 4<sup>th</sup> Edition, John Wiley & Sons, 2015.

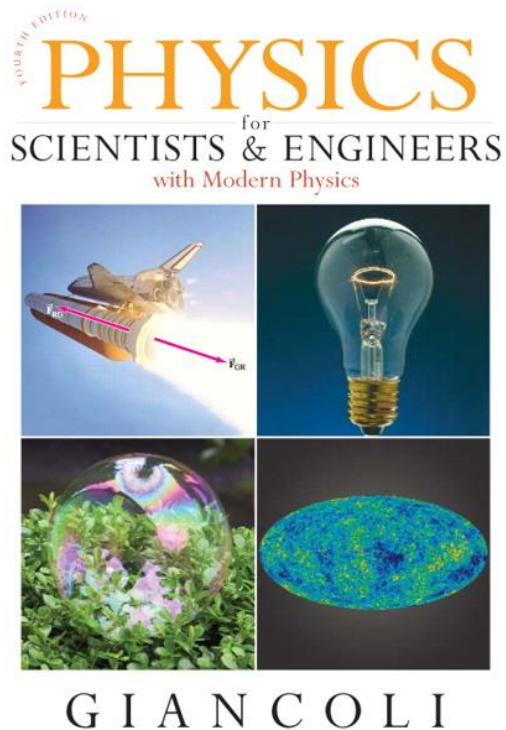


- Raymond A. Serway & John W. Jewett, Jr., **Physics for Scientists and Engineers with Modern Physics**, 7<sup>th</sup> Edition, Brooks Cole, 2008.

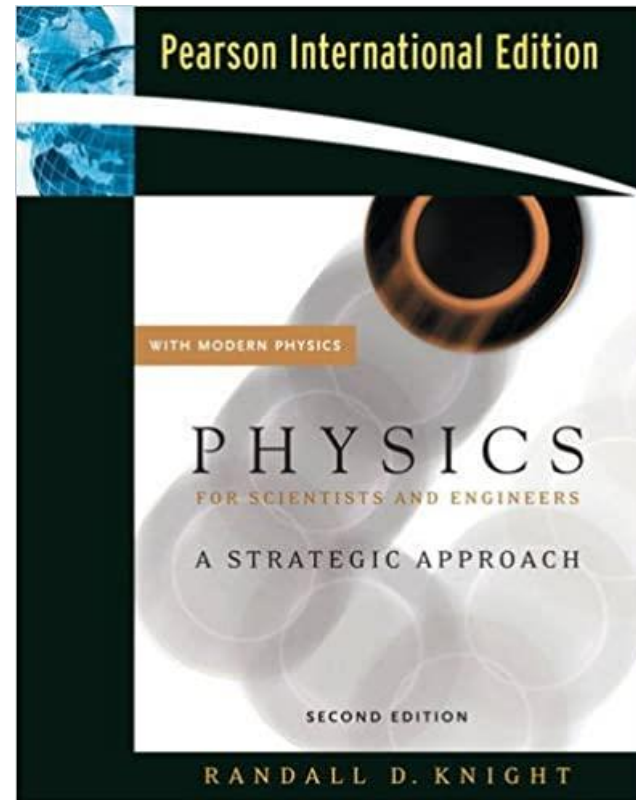




## Additional Supportive Books



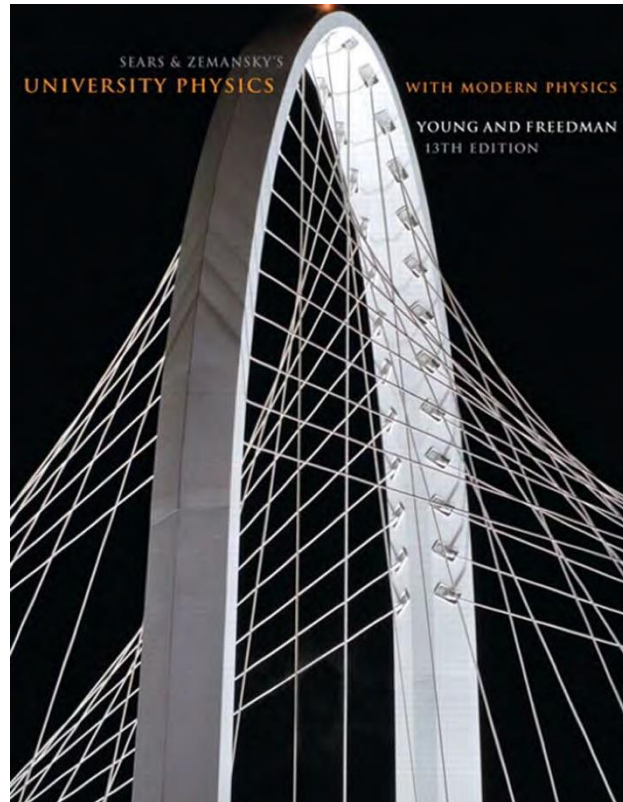
- Douglas C. Giancoli, *Physics for Scientists and Engineers with Modern Physics*, 4<sup>th</sup> Edition, Pearson Education, 2009.



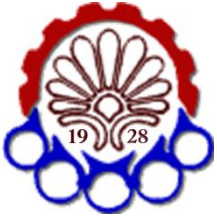
- Randall D. Knight, *Physics for Scientists and Engineers: A Strategic Approach*, 2<sup>nd</sup> Edition, Pearson Education, 2008.



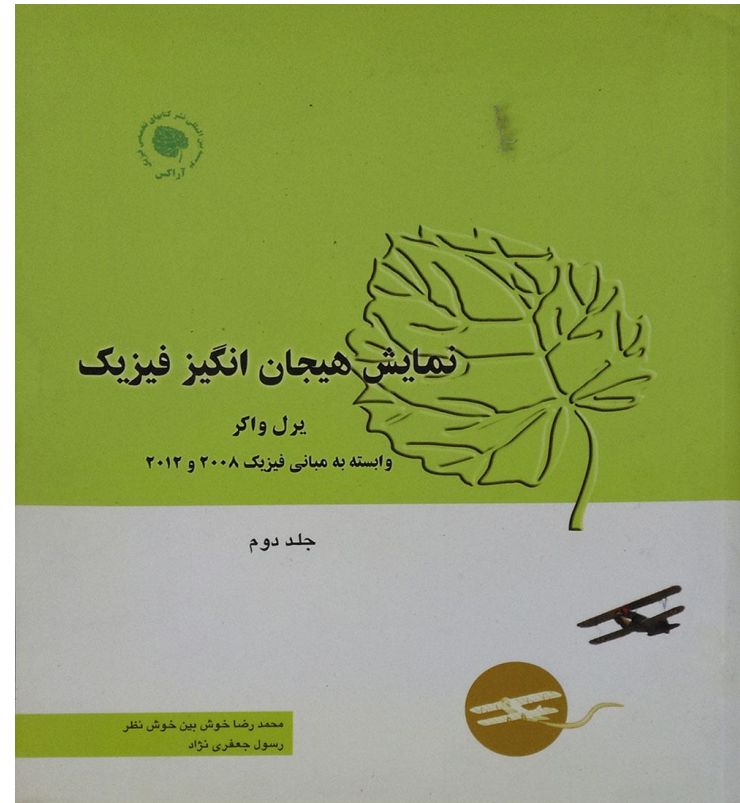
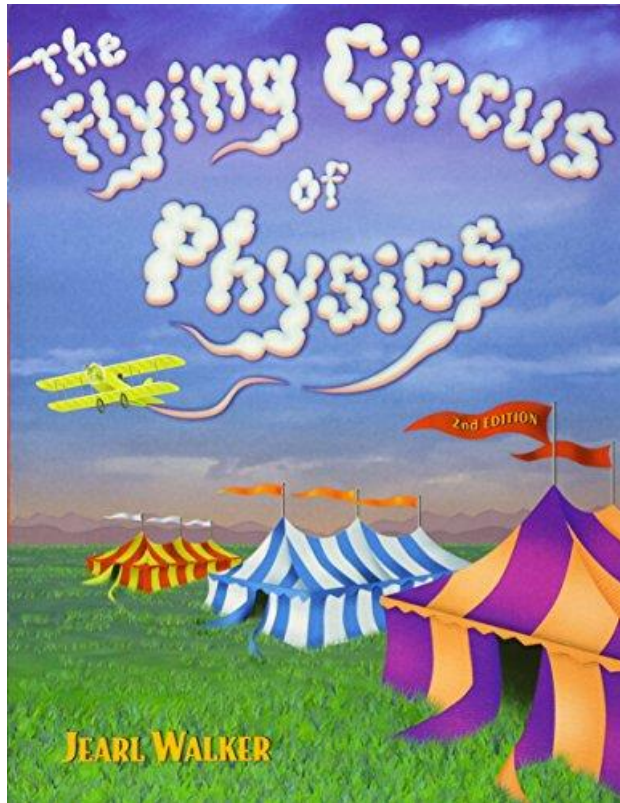
## Additional Supportive Books



- Hugh D. Young, Roger A. Freedman & A. Lewis Ford, [University Physics with Modern Physics](#), 13<sup>th</sup> Edition, Addison- Wesley, 2012.



## Additional Supportive Books



- Jearl Walker, *The Flying Circus of Physics*, 2<sup>nd</sup> Edition, John Wiley & Sons, 2007.
- ❖ **نمایش هیجان انگیز فیزیک، جلد دوم، ترجمه محمد رضا خوش بین خوش نظر و رسول جعفری نژاد، ویراست دوم، آراکس**



## Evaluation Scheme

- Mid-Term Exam & Quizzes (**45%**)
- Final Exam (**45%**)
- TA (**10%**)
- Class Attendance (**+**)