NASC 1100 Our Physical World - Matter & Energy - Fall 2019

(Updated 10-02-2019)

Instructor: Dr. Xunming Deng

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Email for missed class: nasc1100fall2019@yahoo.com

Office hours: Mon & Wed 2:30-3:30pm, Fri 9:30-10:30am, MH5002

Class time: MW: 1:00pm -- 2:20pm

Classroom MH2002

Textbook: Conceptual Physical Science, Sixth Edition, Hewitt, Suchocki, & Hewitt. By Pearson.

Month	Mon		Wed	
Aug	26	Ch. 1	28	Ch. 2
Sept	2	Labor Day	4	Ch. 3
	9	Ch. 4	11	Ch. 5
	16	Ch. 6	18	Ch. 7
	23	Ch. 8	25	Midterm 1
	30	Ch. 9	2	Ch. 10A
Oct	7	Ch. 10B, 11A	9	Ch. 11B
	14	Review Ch. 1-11	16	Ch. 14
	21	Ch. 15	23	Midterm2
	28	Ch. 16	30	Ch. 17
Nov	4	Ch. 18	6	Ch. 22
	11	Veterans Day	13	Ch. 23
	18	Ch. 24	20	Midterm 3
	25	Ch. 26	27	Thanksgiving
Dec	2	Ch. 27	4	Ch. 28
	Final Exam on December 13 (Friday), 12:302:30pm			

Grades: Midterm 1: 20%

Midterm 2: 20%

Midterm 3: (Will pick the best 2 of three midterms)

Final Exam: 40%
Quizzes: 20%
Total: 100%

Quizzes:

There will be 4 to 8 quizzes, without pre-announcement. Each will last ~15min.

Class attendance: Class attendance is required. If you need to skip a class, you need to send me an email to NASC1100Fall2019@yahoo.com, with subject line "John DOE to miss NASC1100 class mm-dd-yyyy", <u>before</u> the class begins and provide reasonable and sufficient reason why you need to skip this class. If we conduct a quiz while you skipped this class with an accepted excuse, this quiz will not be counted for you, and your score on the quiz will be calculated based on your performance in the rest of quizzes.

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*0. Prologue: The Nature of Science

PART 1: PHYSICS

- 1. Patterns of Motion and Equilibrium
- 2. Newton's Laws of Motion
- 3. Momentum and Energy
- 4. Gravity, Projectiles, and Satellites
- 5. Fluid Mechanics
- 6. Temperature, Heat, and Thermodynamics
- 7. Heat Transfer and Change of Phase
- 8. Static and Current Electricity
- 9. Magnetism and Electromagnetic Induction
- 10. Waves and Sound
- 11. Light

PART 2: CHEMISTRY

- *12. Atoms and the Periodic Table
- *13. The Atomic Nucleus and Radioactivity
- 14. Elements of Chemistry
- 15. How Atoms Bond and Molecules Attract
- 16. Mixtures
- 17. How Chemicals React
- 18. Two Classes of Chemical Reactions
- *19. Organic Compounds

PART 3: EARTH SCIENCE

- *20. Rocks and Minerals
- *21. Plate Tectonics and Earth's Interior
- 22. Shaping Earth's Surface
- 23. Geologic Time—Reading the Rock Record
- 24. The Oceans, Atmosphere, and Climatic Effects
- *25. Driving Forces of Weather

PART 4: ASTRONOMY

- 26. The Solar System
- 27. Stars and Galaxies
- 28. The Structure of Space and Time
- *) Chapters for self study