PSCI 2303: Physical Science I

CRN: 28544
Term: Spring 2019
Time: Tuesday Thursday 8:30 am - 10:20 am
Where: PSCI 224

Instructor: Dr. Huiyan Yang
Office: PSCI 215B
Phone: 747-7510
Email: hyang4@utep.edu
Office Hours: MW 10:00 - 11:00 am, or by appointment

Required Materials:
2. Heat and conservation of energy: Student material PSCI 2303.
3. Light and color: Student Materials PSCI 2303.
(Available for ~ $10 each at the Printing Center in the Library.)

Textbook chapters:
Kinematics
   Chapter 2: Newton’s first law of motion-Inertia
   Chapter 3: Linear motion
   Chapter 4: Newton’s second law of motion
   Chapter 5: Newton’s third law of motion
   Chapter 6: Momentum
   Chapter 7: Energy
Heat and conservation of energy
   Chapter 15: Heat and temperature
   Chapter 16: Heat transfer
   Chapter 17: Change of phase
   Chapter 18: Thermodynamics
Light and color
   Chapter 26: Properties of light
   Chapter 27: Color
   Chapter 28: Reflection and refraction
   Chapter 30: Light emission
   (Chapters 29 to 31 will be surveyed)

Understanding of concepts is to be demonstrated by:
   • accurately communicating them in written and verbal formats
   • correctly answering both short and long answer questions
   • completing hands-on activities

Assessment and Grading:
Lab reports (completed in class)  20%
Homework                   20%
Homework Standards:
- May be typed or hand-written.
- Due at start of each class. The due day is when the next homework is assigned.
- You are responsible to hand in all assignments. Late assignments accepted, but penalized.

Exams and Quizzes:
- No makeup exam or quiz is given. The worst midterm exam will be dropped off, and the worst quiz will be dropped off.
- The final exam is mandatory. The student loses 30% credit if the final exam is missed.
- Bring a calculator; cell phones are not allowed.

Additional Course Policies:
- Punctual attendance is critical. Quizzes given at start of class.
- We will have breaks and you may eat and drink (if you’re careful).
- Cell phones should be turned off during class.
- If you miss 2 classes you will be dropped from the course. Three lates (10 minutes or more) will count as an absence.
- When absences occur, it is your responsibility to obtain handouts and notes from your peers. You are responsible to complete the activities you have missed.

These policies will be strictly enforced for two reasons: 1) you are going to be professionals and these policies are typical of professional behavior; and 2) I take your learning very seriously and simply do not want to waste one minute of the time that I have with you.

Military: Students being called for military duties need to contact the instructor as soon as possible.

UTEP Policies on Academic Dishonesty
If an instructor suspects a student of cheating, he/she is to collect evidence that he/she believes indicates this (e.g. exams, student work, etc). This evidence is then turned over to the Assistant Vice President for Student Affairs (VPSA). The student will receive an incomplete on whatever piece of work is under consideration. No other actions will be taken by the instructor until the case is closed: no discussion, no accusation, and no different treatment. The student is encouraged to continue participating in the class. The VPSA will consider the evidence provided her and then contact the accused student (and possibly peers) and investigate the allegations. She will then make a decision as to whether cheating occurred and determine what the consequences will be. The instructor will be consulted by the VPSA as to whether the results of the investigation are acceptable to him/her. If acceptable, the instructor will simply carry out the consequences sent to both the student in question and the instructor in a formal letter from Student Affairs. While the seriousness of the identified dishonest actions determines the nature of the consequences, possible consequences include: a counted “zero” on the piece of work, a letter grade reduction, or being placed on academic probation. Students have the right to appeal a decision and participate in a formal public hearing.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture and Quiz</th>
<th>Lab</th>
<th>Homework</th>
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<tr>
<td>1</td>
<td>Jan 22</td>
<td>CH2: Newton’s first law of motion</td>
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<td>HW1 Chapter 2: RCh 4-20; T&amp;R 31-36; T&amp;E. 47, 51, 56 58, 63</td>
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<td>Jan 24</td>
<td>Quiz 1</td>
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<td>2</td>
<td>Jan 29</td>
<td>CH3: Linear motion</td>
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<td>HW 2 Chapter 3: RCh Odd questions; T&amp;S 36; T&amp;R 44, 45; T&amp;E 53; T&amp;D 80, 81, 84; HWs from Student Material p.55-56</td>
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<td>Jan 31</td>
<td>Quiz 2</td>
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<td>3</td>
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<td>CH4: Newton’s second law of motion</td>
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<td>HW 3 Chapter 4: RCh 10-29; T&amp;S 52; T&amp;E 61, 74, 80; HWs from Student Material p.57-58</td>
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<td>Feb 7</td>
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<td>4</td>
<td>Feb 12</td>
<td>CH5: Newton’s third law of motion</td>
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<td>HW 4 Chapter 5: RCh 1-9; T&amp;E 38, 55; HWs from Student Material p.59-60</td>
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<td>5</td>
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<td>HW 5 Chapter 6: RCh Odd questions; HWs from Student Material p.61-62.</td>
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<td>Feb 21</td>
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<td>6</td>
<td>Feb 26</td>
<td>CH7: Energy</td>
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<td>HW 6 Chapter 7: RCh Odd questions; HWs from Student Material p.63-64.</td>
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<td>Feb 28</td>
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<td>7</td>
<td>Mar 5</td>
<td><strong>Exam 1</strong></td>
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<td>Mar 7</td>
<td>CH15: Heat and temperature</td>
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<td>HW 7 Chapter 15: RCh Odd questions; T&amp;S 36-41</td>
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<td>Mar 12</td>
<td>Quiz 7</td>
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<td>Mar 14</td>
<td>CH16: Heat transfer</td>
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<td>9</td>
<td>Mar 19</td>
<td>Spring Break</td>
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<td>10</td>
<td>Mar 26</td>
<td>Quiz 8</td>
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<td>Mar 28</td>
<td>CH17: Change of phase</td>
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<td>HW 9 Chapter 17: RCh Odd questions.</td>
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<td>CH18: Thermodynamics</td>
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<td>CH26: Properties of light</td>
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<td>CH 27: Color</td>
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<td>Apr 30</td>
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<td>Light 3</td>
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<td>May 2</td>
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<td>HW 14 Chapter 30: RCh Odd questions.</td>
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<td>May 7</td>
<td>Quiz 13</td>
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<td>17</td>
<td>May 14</td>
<td><strong>Final</strong></td>
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<td>10:00 am – 12:45 pm</td>
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</table>

Notes: RCh = Reading Check Questions; T&S = Think and Solve; T&R = Think and Rank; T&E = Think and Explain; T&D = Think and Discuss in *Conceptual Physics, 12th Edition*;