College Physics II (Phys 186) **Topics**

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1 Textbooks

Some of you will be using the online textbook, *College Physics*, by Urone, Hinrichs, Dirk, and Sharma (UHDS). Others may have a copy of *College Physics: A Strategic Approach* by Knight, Jones, & Field (KJF) if you've used it in your section of College Physics I.

2 Included sections

Here is a list of sections in both textbooks that roughly correspond to what I will discuss.

First of all, oscillations and waves:

| UHDS sections | KJF sections |
|-----------------------|------------------|
| 16 : 1–5, 8–11 | 14 : 1–4 |
| 27 : 1–4 | 15 : 1–5 |
| 25 : 1–4 | 16 : 1, 6 |
| | 17 : 1–3 |
| | 18 : 1–3 |

Then, electricity, circuits, and magnetism:

| UHDS sections | KJF sections |
|-----------------------|-----------------------|
| 18 : 1–7 | 20 : 1–7 |
| 19 : 1–5, 7 | 21 : 1–5, 7, 8 |
| 20 : 1–5 | 22 : 1–6 |
| 21 : 3, 4, 6 | 23 : 1–7 |
| 22 : 1–5, 7–10 | 24 : 1–8 |
| 23 : 1–5 | 25 : 1–7 |
| 24 : 1–4 | |

We will round up the semester with a discussion of selected modern physics topics, starting with relativity and quantum physics. We can't do everything, and I will ask the class what you are interested in so we can look at topics that interest you in more detail. So this last list of sections include everything that we *might* do, but we almost certainly will not do it all.

| UHDS sections | KJF sections |
|-----------------------|------------------------|
| 28 : 1–3, 5, 6 | 27 : 1–7, 9, 10 |
| 29 : 1, 3–8 | 28 : 3–7 |
| 30 : 6–9 | 29 : 1, 5 |
| 31 : 1, 5 | 30 : 4, 5, 7 |
| 33 : 2–5 | |
| 34 : 1–7 | |