# PHYS 102 - GENERAL PHYSICS 2

## Problem Session Problems from the 15th edition of Young and Friedman:

**Ch.21:** Discussion questions: 8, 12, 14, 22

Problems: 58, 63, 74, 75, 79, 80, 82, 84, 86

**Ch.22:** 33, 37, 42, 43, 53, 54

**Ch.23:** 41, 61, 66, 71

**Ch.24:** 28, 29, 51, 53, 56, 59, 60, 64

**Ch.25:** Discussion: 1, 5, 6, 9, 13, 19, 20, 21, 24

Exercises & Problems: 1, 9, 30, 31, 35, 40, 41, 43, 70, 71

**Ch.26:** 26, 43, 47, 49, 57, 62, 70, 75

**Ch.27:** 13, 14, 23, 29, 33, 37, 38, 54, 64, 65, 67, 70, 71

**Ch.28:** 8, 12, 27, 29, 50, 58, 60, 61, 66, 69, 70

**Ch.29:** 35, 38, 39, 48, 49, 53, 54, 55, 59, 61

**Ch.30:** Discussion: 2, 5, 7, 13

Excercises: 6, 26, 27, 28, 37

Problems: 46, 60, 62, 63, 66

#### Problem Session Problems from the 14th edition of Young and Friedman:

**Ch.21:** Discussion questions: 8, 11, 12, 14, 22

Problems: 28, 32, 60, 64, 65, 74, 75, 79, 82, 84, 86, 89

**Ch.22:** 37, 39, 46, 47, 59

**Ch.23:** 41, 61, 66, 67, 73

**Ch.24:** 28, 29, 51, 53, 56, 59, 61, 62, 66, 67

**Ch. 25:** Disc:1, 5, 6, 9, 20, 21, Problems:1, 9, 30, 31, 33, 35, 40, 41, 43, 73, 72

**Ch. 26:** 28, 46, 49, 51, 62, 70, 72, 75

**Ch. 27:** 14, 15, 27, 35, 39, 41, 42, 51, 57, 58, 60, 67, 69, 68, 71, 72, 75,

**Ch. 28:** Discussion questions Q6, Q8, Exercises & problems: 12, 28, 39, 42, 43, 69, 71, 73

**Ch. 29:** 46, 50, 51, 55, 56, 57, 60, 61, 62

**Ch. 30:** 27, 32, 52, 57, 59, 60, 61, 66

**Ch. 31:** 16, 24, 33, 40, 45, 47, 48, 57

**Ch.32:** 39, 41, 45,47, 53

#### Problem Session Problems from the 13th edition of Young and Friedman:

**Ch.21:** Discussion questions: 8, 11, 12, 14, 22

Problems: 32, 38, 64, 70, 73, 82, 83, 85, 89, 90, 95, 96, 98, 101

**Ch.22:** 37, 39, 46, 47, 61, 62

Ch.23: 47, 63, 68, 78, 79, 84

**Ch.24:** 30, 31, 55, 57, 60, 63, 64, 65, 66, 72, 75

**Ch.25:** Discussion:1, 5, 6, 9, 13, 19, 20, 21, 24

Problems: 1, 9, 21, 32, 35, 38, 39, 44, 45, 47, 83, 84

**Ch.26:** 28,44,49,50,66,67,74,75,77,78

**Ch.27:** 14,15,30,37,39,42,45,46,55,63,66,68,71,75,77,78,80,81,85,86

**Ch.28:** 7, 8, 15, 16, 31, 34, 44, 61, 68, 71, 72, 78, 83, 84

**Ch.29:** 35,36,40,42,44,45,48,53,54,59,60,63,65,69,71

**Ch.30:** Discussion questions: 30.2, 30.5, 30.7, 30.9, 30.11

Exercises: 30.6, 30.12, 30.13, 30.18, 30.26, 30.27, 30.28, 30.37, 30.42

Problems: 30.44, 30.45, 30.48, 30.53, 30.54, 30.55, 30.63, 30.68, 30.70, 30.71, 30.74

**Ch.31:** 39, 40, 53, 55, 63, 72

**Ch.32:** 1, 3, 7, 8, 11, 15, 35, 44, 46

#### Problem Session Problems from the 12th edition of Young and Friedman:

**Ch.21:** 22, 23, 24, 28, 33, 40, 47, 55, 57, 62, 71, 74, 89, 90, 96, 99

**Ch.22:**32, 35, 40, 41, 42, 43, 44, 45, 48, 51, 57, 58

**Ch. 23:**9, 15, 22, 41, 47, 49, 52, 57, 60, 61, 66, 73, 78, 79, 86

**Ch. 24:**13, 25, 32, 45, 60, 65, 71, 72, 75

**Ch25**: 34, 53, 63, 76

**Ch26**:47, 64, 68, 72, 82

**Ch27**: 7, 12, 14, 24, 30, 59, 67, 68, 72, 75, 77, 79, 81, 84, 90

Ch.28:f

**Ch. 29:**33, 36, 37, 48, 49, 53, 56, 59, 61, 65, 67, 70, 72

**Ch. 30:**4, 11, 14, 58, 66, 68, 73

**Ch. 31:**41, 45, 47, 49

**Ch. 32:**39, 41, 45, 51, 52, 53

#### Problem Session Problems from the 11th edition of Young and Friedman:

Ch.21: 69,71,77,87,95 (week 1)

Ch. 22: 38, 42, 54, 58, 62 (week 2)

Ch. 23: 3,17,33,41,57 (week 3)

Ch.23: 32, 34, 37, 42 (week 4)

Ch. 24: 13 15 29 39 71 (week 5) Ch. 24: 11,23,61,65,67 (week 6)

Ch 25: 3,23,35,45,61 (week 7)

Ch.26 PS: 15,19,21,29,37,45 (week 8)

MT1 (week 9)

Ch. 27: 7,11,25,29,37,45 (week 10)

Ch.27: 1, 15, 33 Ch.28: 1, 9, 16 (week 11)

Ch.28: 3,12,23,27,32 (week 12)

Ch. 29: 11, 19, 24, 30 (week 14)

Ch. 30.1, 30.7 (week 14)

### Suggested Problems from the 10th edition of Young and Friedman:

Ch.21: 70,75,81,83,86,94,98,99,101,102

Ch. 22: 36, 39, 45, 49, 61

Ch. 23: 5,13,21,39,43,51,59,63,79,83

Ch. 24: 3 17 25 37 41 45 57 59 63 69

Ch. 25: 5,15,27,37,41,47,49,59,71,77

Ch. 26: 9,17,23,41,43,47,59,69,79,83

Ch. 27: 9,13,20,31,39,40,44,56,75,79

Ch. 28: 2,5,7,11,18,20,21,22,24,25

Ch. 29: 1,3,7,8,17,20,21,25,27,32

Ch.30: 2,8,9,13,18

# **Problem solving strategies**