

Physics 108 Assignment#6 (due on 5/14/2018)

**Reading materials:**

*Pedrotti 3<sup>rd</sup> Edition:*       **Chapter 23:** 23-1 through 23-7

*Lecture Notes:*               pp. 78 - 95

**Homework:** (Pedrotti 3<sup>rd</sup> Edition)

1.     23-2
2.     23-5
3.     23-12
4.     23-13
5.     23-15
6.     23-16
7.     23-20
8.     ***Landscape Lens:*** Perform the Introductory Exercise on Landscape Lens using OSLOEDU software. Show YOUR results by (1) displaying the starting “Surface Data” and “Lens Drawing” for paraxial rays and non-paraxial rays; and (2) displaying your optimized “Surface Data” and “Lens Drawing” for paraxial rays and non-paraxial rays. (You may also try the following condition for start: and “draw off”).

| SRF<br>OBJ | RADIUS      | THICKNESS    | APERTURE RADIUS | GLASS | SPE |
|------------|-------------|--------------|-----------------|-------|-----|
|            | --          | 1.6000e+03   | 582.352375      | AIR   | *   |
| 1          | 21.807957 V | 4.000000     | 11.666830 S     | BK7   | C   |
| 2          | 27.777778   | 12.647480 V  | 9.997114 S      | AIR   |     |
| AST        | --          | 155.058604 S | 4.341641 AS     | AIR   | *   |
| IMS        | --          | --           | 67.000000       |       | *   |