Physics 108 Homework Assignment#3 (1-13 due on 4/23/2018 and 14 on 5/14/2018)

Reading materials:

Pedrotti 3rd Edition:	**Chapter 4**: 4-1 through 4-8 **Chapter 5**: 5-1; 5-2; 5-4; 5-5 **Chapter 7**: 7-1 through 7-7 **Chapter 8**: 8-1 and 8-2.
Lecture Notes:	pp. 37-48

Homework: (Pedrotti 3rd Edition)

1. 4-11 (Math review)
2. 4-12 (Math review)
3. 4-13 (Math review)
4. 5-4 (Math review)
5. Derive the total phase difference between the reflection of a single monochromatic beam (vacuum wavelength λ_0) from two parallel surfaces with n´ (semi-infinite, incidence angle θ´), n (thickness d, refraction angle θ), n´ (semi-infinite).
6. 7-4
7. 7-11
8. 7-14
9. 7-19
10. 7-20
11. 8-1
12. 8-2
13. 8-3

14. (**Due 5/14/18**) ***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	RADIUS	THICKNESS	APERTURE RADIUS	GLASS	SPE
OBJ	--	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		*