

INTERSECTION THEORY READING GROUP.

[GOS] - Eisenbud, Harris, "The geometry of schemes"

[3264] - Eisenbud, Harris, "3264 X all that, intersection theory in Algebraic geometry"

[FAC] - Serre, "Faisceaux algébriques cohérents"

S1 - Sheaves & schemes (background).

[GOS] - Chapter 1-3, [FAC] Ex in GOS

S2 - Chow rings

[3264] - 1.1, 1.2, 1.3 (Ex. in 1.5)

S3 - 1st Chern class of a line bundle
+ Examples of Chow rings, pt I

[3264] - 1.4, 2.1, 2.2, 2.3, 2.4, 2.5 Ex (2.6)
make a selection of examples.

S4 - Grassmannians and the Chow ring of $G(1,3)$

[3264] - Chapter 3 Ex (3.7)

S5 - Grassmannians in general

[3264] - Chapter 4, would focus

on 4.1 - 4.5

Ex (4.9)

S6 - Chern classes, pt I

[3264] - 5.1 - 5.6

Ex (5.10)

S7 - Chern classes, pt II, Fano schemes

[3264] - 5.7 - 5.8, 6.1, 6.2

Ex (5.10, 6.9)

S8 - Lines on hypersurfaces (Fano + Hilbert schemes)

[3264] - Chapter 6

Ex (6.9)

S9 - Parameter spaces

[3264] - Chapter 8

Ex (8.6)

S10 - Segre classes & secant varieties

[3264] - Chapter 10

Ex (10.7)