DPA 8150:
Visual Effects & Compositing

11:00 - 12:15
Tuesday and Thursday
McAdams 110E and Zucker 104
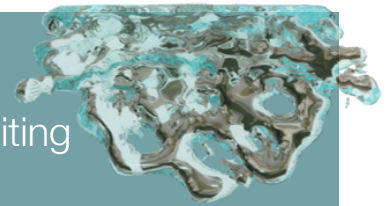
Week 1	January		8	**9**	10
History of Visual Effects					
VES Ch. 1; Brinkmann Ch. 1; Rickitt Ch. 1; Ganbar Ch. 1, 2					
Week 2		13	**14** *H0 Due*	15	**16**	17
Traditional Optical Techniques					
Brinkmann Ch. 2; VES Ch. 2, 3; Rickitt Ch. 2-7; Ganbar Ch. 3					
Week 3		20	**21** *H1 Due*	22	**23**	24
Breakdown, Bidding, & Shot Planning					
Brinkmann Ch. 15; VES Ch. 2, 3, Ganbar Ch. 4					
Week 4		27	**28**	29	**30**	31
Previsualization; On-Set Methods and Departments					
Brink Ch. 15; VES Ch. 2, 3; Ganbar Ch. 5, 6 *H2 Due*					
Week 5	February	3	**4** *H3 Due*	5	**6** *Test 1, tentative*	7
Acquisition: Camera, Film, and Digital Properties					
Brink Ch. 2, 10, 11; VES Ch. 3; Ganbar Ch. 7					
Week 6		10	**11** *H4 Due*	12	**13**	14
Representation: Image Format, Manipulation, Display					
Brink Ch. 3, 4; VES Ch. 5; Ganbar Ch. 9					
Week 7		17	**18** *H5 Due*	19	**20**	21
Compositing Theory					
Brinkmann Ch. 5; VES Ch. 10; Ganbar Ch. 10					
Week 8		24	**25** *H6 Due*	26	**27**	28
Kernels and Keying					
Brinkmann Ch. 4, 6; Ganbar Ch. 11					
Week 9	March	2	3	4	**5**	6
Lighting, Rendering, HDR, & IBL					
Brinkmann Ch. 12, 13; Dobbert Ch. 1-4; Ganbar Ch. 12, Appendix					
Week 10		9	**10** *Test 2, tentative*	11	**12** *P1 Due*	13
Tracking and Matchmoving (mean-shift, SIFT, optical flow)					
Brinkmann Ch. 8; Dobbert Ch. 7-11					
Week 11		*16*	*17*	*18* <———-Spring Break———>	*19*	*20*
Week 12		23	**24**	25	**26**	27
Color Correction					
Brinkmann Ch. 14, Appendix B; Ganbar Ch. 4					
Week 13	April	30	**31**	1	**2**	3
Projection Techniques					
Brinkamn Ch. 14; Ganbar Ch. 11					
Week 14		6	**7** *P2 Due*	8	**9**	10
Matte Painting and Set Extensions					
Ganbar Ch. 11, 12; Rickitt Ch 5					
Week 15		13	**14**	15	**16**	17
Deep Techniques					
Week 16		18	**19**	20	**21** *Test 3, tentative*	22
Misc, Tools, Realtime Techniques					
VES Ch. 8					

Exam Date: Wednesday, April 29, 15:00 - 17:30
            Final Production Project (P3) Due Date TBA

"That is the most difficult thing of all, though it would seem the easiest: to see that which is before one's eyes."
-- Johann Wolfgang von Goethe

Required Texts

- *The Art and Science of Digital Compositing* by Ron Brinkmann.
- *Nuke 101: Professional Compositing and Visual Effects* by Ron Ganbar.

Optional & Reference Texts

- *The VES Handbook of Visual Effects.*
- *Special Effects: The History and Technique* by Richard Rickitt.
- *Matchmoving: The Invisible Art of Camera Tracking* by Tim Dobbert.