DIRECTING IN A VIRTUAL WORLD
CTPR 551 – Fall 2016

Section 18679 Fri 1:00 – 4:50 RZC D&E Units: 2

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Pre-requisite:
CTAN 462 or permission from faculty that qualifications are equal to or exceed CTAN 462 requirements.

Strongly Recommended Preparation:

CTAN 555 and CTPR 532 or CTPR 537

Recommended Reference Materials:
AN ACTOR'S HANDBOOK by Constantin Stanislavski
A PRACTICAL HANDBOOK FOR THE ACTOR by Melissa Bruder, et al
VISUAL EFFECTS FOR DIRECTORS a 7-DVD set (in Animation Library)
VES HANDBOOK OF VISUAL EFFECTS by Visual Effects Society, Focal Press
SPECIAL EFFECTS – THE HISTORY & TECHNIQUE by Richard Rickett

COURSE OBJECTIVES

This course will prepare Directing and Animation students for the process of creating films with visual effects, composited & virtual backgrounds, environments, and characters. Objectives are: (1) to immerse all students in the thinking required for this technique – namely, photographing talent & objects against Green Screen or Blue Screen backgrounds -- particularly with respect to actor performance, lighting, and shot design, staging, camera technique; (2) to imbue essential basic nomenclature and techniques of working with actors, particularly in a visual effects context, and with live-action methodologies with which they have had limited experience; (3) to solidify a grasp of practical considerations & procedures in application of the foregoing to scenes requiring digitally composited and fabricated backgrounds; and most important, (4) to create effective, seamless, VFX shots designed to enhance the story being told.

It is expected that students will have achieved in-depth familiarity, if not mastery,

of the tools for scene realization with virtual components, and be able to conceive & execute shots and scenes (on a basic level) which use Visual Effects to the advantage of the story being told.

COURSE DESCRIPTION

Enrollment will be 15 students, Aiming for a mix of 8 from the Production Division & 7 from DADA and other SCA Divisions. The class is designed to work with as few as 12 students, and as many as 18. However, if the class were to be 18 students, 3 will have to agree that they will not direct a project of their own – given that there are 15 projects. Sharing directing responsibilities on a project is a possibility, with approval of the professors.

The ultimate class mix is more dependent on a good mix and balance of student skills than it is on which division a student comes from. Students will work in teams of five. We will attempt to retain within the teams a good mix of students with digital skills, production and directing skills, and cinematography. During the term each student – working w/their teammates as crew – will be the responsible Director on one of the weekly Projects. Additionally, each student will rotate weekly through the roles of Producer/AD, Visual Effects Supervisor, Production designer, and Cinematographer. By the end of the term, each team will be involved in the production and completion of 5 Group Projects, with each student team member being the responsible Director for one of those 5. Projects will represent increasing levels of difficulty, using Green Screen or Blue Screen to create what could not be done otherwise.

Finished projects will be single shots without sound, using composited visual elements, and addressing ways to integrate live action, non-spatially and temporally connected live action, and virtual elements into a story. Students are free to choose how they will stage each project, but the goal of each project will be clearly delineated, and the goal must be met in the resulting finished work.

Each student assigned to direct a project will pitch a complete story, framing the project to be done. Each director will then choose a shot from the story that represents a specific moment that needs to be completed using visual effects. At each week's shoot, the director will present the class with a script page for the shot, as if it were part of a larger whole. The purpose is to give the students a basis on which to direct their actors.

Students will, for each project, cast professional actors & conduct scene rehearsals with these actors. They will receive support from Production teammates in "breakout" sessions during the rehearsals and shooting. In these sessions the actor(s) will be asked to take a break of a few minutes while the class discusses the progress of the performances and staging with the director and the professors.

The class will meet Friday afternoons from 1:00PM to 4:50PM. On Friday mornings, some set up of Green/Blue Screens & grip/lighting equipment may be

necessary depending on the requirements of the Project the shooting team is working on. Screens, lighting, staging, and camera gear will be utilized during class; and after the end of class late Friday afternoons, the erected equipment may be left intact, so that students complete their projects on Saturday if time proves insufficient on Friday afternoon. Friday evenings, and Saturday all-day (perhaps split into two half-day sessions for simpler projects), will be allotted for the team projects. All set ups must be struck and returned to storage, and all stages clean at the end of each Project being shot.

Tutorials

On at least the first three Saturday mornings (depending on holiday schedule – this varies by a week each term) of the semester we will conduct tutorials where basic instruction on compositing, camera and object tracking, and other visual effects skills will be taught. All students are required to attend these sessions no matter what their skill level. Additional tutorials on subsequent Saturday mornings may occur as needed to improve student skills and capabilities. These tutorials will be short and sweet, but are very important, particularly to Production students who may have had little or no exposure to these techniques and tools.

Production, Post-Production, & Compositing

These processes will rely heavily on the facilities & resources of the Animation Division. Tutorials will be led on Saturdays by the Animation SA on the use of software and hardware for the class, and by the Production SA on the use and care of our dedicated production tools, equipment, and space. Students will be expected to assist others on their teams, sharing their expertise in production and post-production processes.

COURSE GOALS

During the introductory phase, topics covered will include:
--WHEN TO GREEN SCREEN & WHEN NOT TO -- REDUCING COST & DANGER, AND MAKING THE 'IMPOSSIBLE' POSSIBLE
--LIMITATIONS TO LIVE ACTION STAGING IMPOSED BY GREEN SCREEN
--LIGHTING, LIGHTING, & LIGHTING – THE ALL-IMPORANT LINCHPIN
--OTHER TECHNICAL PARAMETERS, TRACKING MARKS, COMPOSITING
--DIRECTING ACTORS IN THE BIG GREEN LIMBO
--TRICKS-OF-THE-TRADE (e.g., Up-angles to avoid problems; staging scenes w/distance or chasms between Mid-Ground & Deep/Distant Background)

During the Project phase, students will encounter the following exercises within their project parameters:

Lighting, lighting, and lighting
Directing Actors in the Big Green Limbo
Simple pans/tilts & limited tracking/booming

Chasing shots (follow after) & Widening shots (pull back to reveal)
Compound camera moves & limitations imposed by compositing
Complex actor movement/tracking marks
Complex camera movement/tracking marks
Night scenes & special times-of-day
Skyscraper scenes & shooting out windows
Poor Man's process (vehicles or on-foot)
"Tokyo Drift" or Fighter Pilot/Star Wars Death Star attack
Fight scenes/dance scenes/acrobatic scenes
Chase scenes (vehicle or human)
Action and/or high danger scenes (like from a cliff looking down)
Compositing shot plates
Compositing non-real (virtual) BGs
Interaction between actors, or actors and objects, shot separately
The power of relative motion
"They must be Giants" – scaling action for outsize or undersize characters

Students will investigate techniques, and master the intricacies, of work they hope to integrate into their future Thesis projects and beyond.

SCHEDULE

Exact scheduling may be revised based on complexity of individual projects and availability of required resources. The first three sessions will combine work on Team Projects with lectures, discussions, screening of clips & analysis, and demos; as well as in-class presentation of students' "on-paper" assignments. STUDENTS WILL BEGIN WORK ON TEAM PROJECTS WITH THE VERY FIRST CLASS SESSION.

During the semester, students will be sent out to shoot "Background Plates" or "Elements" as part of their Team Projects. These plate and element shoots will require time to shoot, during the week or on weekends. All necessary safety precautions must be taken, and all clearances obtained, for these shoots.

The class will consist of "rolling assignments", so that in each week each team will be either Pitching, Shooting, or Showing, their work. In a given Friday class meeting, for instance, Team A will be pitching their project, Team B will be shooting the green screen portion of their project, and Team C will be showing their composited shot, either finished or as work-in-progress. The following week, Team C would be pitching, Team A shooting, and Team B, showing their composite. And so on through the semester.

TUTORIALS –

Throughout the semester we will offer tutorials in compositing, tracking, rotoscoping, etc. These tutorials are not mandatory, but are highly recommended. Students can use this time to ask technical questions and find solutions in the projects they are doing. In the first class of the semester we will

pick a day and time that is the best day and time for the majority of students, and the tutorials will be held then.

Wk 1 –
August 26 Introduce Schedule/Production numbers, equipment description, explanation and checkout, clips/discussion, basic concepts of the class and the work. Assignment of first project to all teams simultaneously, with direction on the required pitch by each team's director.

Wk 2 –
September 2 Lecture/Demo regarding equipment, and basic techniques. Introduction of use of light meter when shooting green or blue screens. Lecture/Discussion on issues of directing actors for virtual scenes. View dailies from all three Teams' Project 1. Prep and Shoot green screen action for all three Teams' Project 1. Team A pitches its Project 2.

September 3 – 5 Labor Day Weekend

Wk 3 –
September 9 Teams present finished composites of Project 1. Team A shoots its Project 2. Team B pitches its Project 2. All team helps Team A with prep and shoot.

Wk 4 –
September 16 Team A shows its composited Project 2. Team B shoots its Project 2. Team C pitches its Project 2. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 5 –
September 23 Team B shows its composited Project 2. Team C shoots its Project 2. Team A pitches its Project 3. Review dailies from previous week's work. Discuss Pitch and Directing and Visual Effects issues with all projects.

Wk 6 –
September 30 Team C shows its composited Project 2. Team A shoots its Project 3. Team B pitches its Project 3. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 7 –
October 7 Team A shows its composited Project 3. Team B shoots its Project 3. Team C pitches its Project 3. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 8 –
October 14 Team B shows its composited Project 3. Team C shoots its Project 3. Team A pitches its Project 4. Review dailies from previous week's

work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 9 –
October 21 Team C shows its composited Project 3. Team A shoots its Project 4. Team B pitches its Project 4. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 10 –
October 28 Team A shows its composited Project 4. Team B shoots its Project 4. Team C pitches its Project 4. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 11 –
November 4 Team B shows its composited Project 4. Team C shoots its Project 4. Team A pitches its Project 5. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 12 –
November 11 Team C shows its composited Project 4, and pitches its Project 5. Team A shoots its Project 5. Team B pitches its Project 5. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 13 –
November 18 Team A shows its composited Project 5. Team B shoots its Project 5. Team C shoots its Project 5. This is the one day in which 2 teams shoot simultaneously. Review dailies from previous week's work. Discuss pitch and Directing and Visual Effects issues with all projects. Discussion of work to complete all shots by Finals Week.

Thanksgiving Recess – November 23 - 26

Wk 14 –
December 2 Last Class of the semester. Team B shows its composited Project 5. Team C shows composited Project 5. Screen all work in progress for all students in all teams. Discuss Pitch and Directing and Visual Effects issues with all projects. Discuss Final screening, and what is expected.

Final –
December 14, 11:00AM - 1:00PM Based on Finals Schedule in Schedule of Classes. Final "locked" Screenings of re-comps and finished projects from all 15 students.

CASTING & REHEARSALS

Casting will be according to the SCA SAG Agreement. Team members will be

expected to assist each other in casting, and in particular, Production students will be expected to be available to assist Animation students with these tasks.

GRADING

- Projects: **55% (11%x5 projects) -** Students will be graded on the quality of the storytelling, technical challenges, lighting, design, and successful completion of projects within the assigned deadlines.

- Participation: **20% (4%x5 projects) -** The class is intensely collaborative. Overall participation means students will be evaluated on how well they communicate their needs on a project to their teammates and to the class at large. On any group media project, the ability to collaborate and share information is critical – and never more critical than when dealing with virtual components.

- Crewing Responsibilities: **25% (5%x5 projects) -** Each student will be evaluated on how well they have performed in their individual role as director, producer, visual effects supervisor, production designer, or cinematographer. This is very much weighted on how each student takes on the responsibilities of each of those roles.

Missing "delivery dates" will not be excused without documented medical or personal emergencies. YOU MUST HAVE "PLAN Bs" (and "Cs") FOR ALL CONTINGENCIES. Instructors reserve the right to **not accept** late assignments.

There will be NO unexcused absences (documentation required for excused absences). You will receive a reduction of one-third letter grade for each unexcused absence, and Instructors reserve the right to not allow Directing a project if your absence negatively impacts another student's project.

Tardiness will not be tolerated, as there is simply too much that needs to be accomplished. There will be one "official" warning for tardiness, and then we will lower grades by one-third letter grade each occurrence.

SAFETY & RESTRICTIONS:
Violations of any of the Safety Guidelines may result in disciplinary action ranging from confiscation of footage to expulsion from the University. The use of minors, moving cars, or weapons requires the employment of a studio teacher (for child actor) or off-duty police officer (prop weapon/car).

Students With Disabilities: *Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to Instructor (or S.A.) as early in the semester as possible. DSP is located in STU 301, and is*

open 8:30am-5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

Statement on Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. Scampus, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: http://www.usc.edu/dept/publications/SCAMPUS/gov/. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.

Emergency Preparedness/Course Continuity in a Crisis

In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.

Please activate your course in Blackboard with access to the course syllabus. Whether or not you use Blackboard regularly, these preparations will be crucial in an emergency. USC's Blackboard learning management system and support information is available at blackboard.usc.edu.

Disruptive Student Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action.