DIRECTING IN A VIRTUAL WORLD
CTPR 551 – Spring 2019

Section 18681D Fri 1:00 – 4:50 RZC D&E Units: 2

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

Strongly Recommended Preparation:
CTPR 532 or CTPR 537 or both.

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 DESCRIPTION

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.

**COURSE OBJECTIVES**

It is expected that students will achieve familiarity, but not necessarily 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.

Enrollment will be 12 students, aiming for a mix of students from the Production Division & Division of Animation and Digital Arts.

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 four – Director, Cinematographer, Producer, Visual Effects Supervisor. We will attempt to retain within the teams a good mix of students with digital skills, production and directing skills, and cinematography skills. During the semester each student – working w/their teammates as crew – will be the responsible Director on one of the weekly Projects. Additionally, each student not directing that week will rotate weekly through the roles of Producer/AD, Visual Effects Supervisor, and Cinematographer. By the end of the term, each team will be involved in the production and completion of 4 Team Projects, with each student team member being the responsible Director for one of those 4.

Finished projects need only 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 – an "elevator pitch" for a film/video/commercial. Each director will then choose a shot or short scene from the story that represents a specific moment that needs to be completed using visual effects. Each director will submit, on Tuesday of the week of their director’s pitch, a written “elevator pitch” of the project, a technical description of the scene to be shot, and a Scene Analysis. A template for the Scene Analysis will be handed out to all students the first day of class. At each week’s shoot, the director will present the class with a script page for the scene, as if it were part of a larger whole. The purpose is to give students a basis on which to direct their actors, and for the crew to understand the scope of the work.

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, and stunt rigs, 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. All set ups must be struck and returned to storage, and all stages clean at the end of each Friday Project shoot. If a student determines that they will need the stage on the weekend of their Friday shoot, they must book the stage to hold it for their shoot as soon as they make that determination. Use of the stage on weekends is not guaranteed. Booking is first come, first reserved.

Tutorials

Every other week, starting with the 3rd week 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 requested, but are not required, to attend these sessions no matter what their skill level. 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. The schedule for these sessions will be set in the first week of class in concert with the enrolled students and the Student Assistants.

Production, Post-Production, & Compositing

These processes will rely heavily on the facilities & resources of the SCA Labs. Tutorials will be led, on the days to be scheduled, 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-IMPORTANT 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
- Chasing shots (follow after as actor walks away from camera) & Leading shots (lead actor as actor walks toward camera)
- 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 projects and beyond.

**SCHEDULE**

Exact scheduling may be revised based on complexity of individual projects, visiting experts, possible field trips, 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 typical 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.

Wk 1 –
January 11  Introduce Schedule/Production Numbers, equipment description and explanation, clips/discussion, basic concepts of the class and the work. Introduction of use of light meter when shooting green or blue screens. Lecture/Discussion on issues of directing actors for virtual scenes. Assignment of first project to all teams simultaneously. All teams to work on first project simultaneously, aiming to shoot green screen live action following week. This class is mandatory. All students registered, or on the waitlist and hoping to register, must attend this class.

Wk 2 –
January 18  Lecture/Demo regarding equipment, and basic techniques. View dailies from all three Teams’ Project 1 background images. Prep and Shoot green screen action for all three Teams’ Project 1. Team A pitches its Project 2.

Wk 3 –
January 26  All teams present finished composites of Project 1. Team A shoots its Project 2. Team B pitches its Project 2. All teams support Team A with prep and shoot.

Wk 4 –
February 1  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 –
February 8  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 –
February 15 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 –
February 22 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 –
March 1  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 –
March 8  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.

***********************************SPRING BREAK***********************************
March 10 to March 17

Wk 10 –
March 22 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 –
March 29 Team B shows its composited Project 4. Team C shoots its Project 4. Team A supports shoot. Review dailies from previous week’s work. Discuss pitch and Directing and Visual Effects issues with all projects.

Wk 12 –
April 5 Team C shows its composited Project 4. Discuss Directing and Visual Effects issues with all projects.

Wk 13 –
April 12 Travel to visual effects facility or virtual production facility for tour and instruction - discuss virtual production, forms of image capture, VR, etc. Discussion of work needed to complete all shots by Finals Week.

Wk 14 –
April 19 Pre-screening of all projects as final work in progress for last notes to prep for final screening on May 2. Introduction to Motion Capture, and MoCap demo. General discussion about visual effects and storytelling. Time permitting, work in lab on projects.

Wk 15 –
April 26 Last class of the semester. Re-Cap with examples VFX/Directing choices.
Discussion about work required for final screening. Possible additional field trip.

Final –
May 1, 2:00 - 4:00PM Based on Finals Schedule in Schedule of Classes. Final “locked” Screenings of re-comps and finished projects from all 12 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: 40% (10% x 4 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: 16% (4% x 4 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: 16% (4% x 4 projects) - Each student will be evaluated on how well they have performed in their individual role as director, producer, visual effects supervisor, or cinematographer. This is very much weighted on how well each student takes on the responsibilities of each of those roles.

- Written Work: 28% (7% x 4 projects) – Each student will be evaluated on the writing and preparation for their pitches, scene analyses, and description of work to be done.

GRADING SCALE

Course final grades will be determined using the following scale:

A 95-100
A- 90-94
B+ 87-89
B 83-86
B- 80-82
C+ 77-79
C 73-76
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 is required for excused absences). You will receive a reduction of one-half letter grade for each unexcused absence. Two unexcused absences will result in a student's grade being lowered by one full letter (IE: A becomes B). A third unexcused absence will result in a student's grade being lowered by one additional full letter (IE: B becomes C). A student's grade will be lowered by one full letter for each additional unexcused absence. Two late class arrivals equate to one full absence.

For an absence to be excused, the student must have approval from the professor and provide documentation at the next attended class session. If a student misses class due to an emergency, the student must contact the professor or SA prior to class (contact information at the head of this syllabus). 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 at the first class, and then we will lower grades by one-half 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). Completed and signed Hazardous Condition forms must be submitted to the Production SA for any scene using knives, guns, stunts. If you are not certain whether your project falls in those categories, check with your SA and faculty.

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.

Diversity and Inclusion -
Diversity and Inclusion are foundational to the SCA community. We are committed to fostering a welcoming and supportive environment where students of all identities and backgrounds can flourish. The classroom should be a space for open discussion of ideas and self-expression; however, SCA will not tolerate verbal or written abuse, threats, harassment, intimidation or violence against person or property. If students are concerned about these matters in the classroom setting they are encouraged to contact their SCA Diversity and Inclusion Liaison, http://cinema.usc.edu/about/diversity.cfm; e-mail diversity@cinema.usc.edu. You can also report discrimination based on a protected class here https://equity.usc.edu/harassment-or-discrimination/

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 the general principles of Academic Honesty. 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/.

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 appropriate office for disciplinary action.

This language extends to physical and verbal disruptive behavior, and virtual or online harassment, intimidation or bullying. At no time will such behavior be tolerated, and students involved in this behavior will be subject to disciplinary action that could result in departure from and failure of the class or in severe cases, withdrawal from the University.
Statement on Academic Conduct and Support Systems

Academic Conduct:

**Plagiarism** - Presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” [https://policy.usc.edu/scampuspart-b/](https://policy.usc.edu/scampuspart-b/).

Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, [http://policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct).

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. [https://engemannshc.usc.edu/counseling/](https://engemannshc.usc.edu/counseling/)
National Suicide Prevention Lifeline - 1-800-273-8255
Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. [http://www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)

Student Support and Advocacy – (213) 821-4710
Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. [https://studentaffairs.usc.edu/ssa/](https://studentaffairs.usc.edu/ssa/)

Student Health Leave Coordinator – 213-821-4710
Located in USC Support and Advocacy Office, the Health Leave Coordinator processes requests for health leaves of absence and advocates for students taking such leaves when needed. [https://policy.usc.edu/student-health-leave-absence/](https://policy.usc.edu/student-health-leave-absence/)

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call
Free and confidential therapy services, workshops, and training for situations related to gender-based harm. [https://engemannshc.usc.edu/rsvp/](https://engemannshc.usc.edu/rsvp/)

Sexual Assault Resource Center -
For information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: [http://sarc.usc.edu/](http://sarc.usc.edu/)
Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086 - Works with faculty, staff, visitors, applicants, and students around issues of protected class. https://equity.usc.edu/

Bias Assessment Response and Support - Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. https://studentaffairs.usc.edu/bias-assessment-response-support/

The Office of Disability Services and Programs - Provides certification for students with disabilities and helps arrange relevant accommodations. http://dsp.usc.edu

Diversity at USC - Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. https://diversity.usc.edu/

USC Emergency Information - Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, http://emergency.usc.edu

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime. Provides overall safety to USC community. http://dps.usc.edu Works with faculty, staff, visitors, applicants, and students around issues of protected class. https://equity.usc.edu/

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.