

# **ANI421: ANIMATION MECHANICS**

## **Syllabus Fall 2017**

Wednesdays: 5:45 pm – 9pm, CDM room 527

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### **Course Summary**

A graduate level production class that covers classic hand-drawn techniques in the art of animation, including metamorphosis, squash and stretch, anticipations, overshoots, walk and run cycles, and various techniques used by artists over the past century. Students will complete weekly assignments that focus on learning these advanced skills and then apply these to their own, personal animated projects in all future production.

### **Learning Goals**

- Practice fundamental animation principles including timing and spacing, staging, weight, anticipation, observation, squash and stretch, and arcs of action.
- View and analyze a broad variety of historical animation techniques from independent, expressive work, as well as from commercial work.
- Complete weekly animated assignments on time, with the software provided.
- Learn the choreography, timing, and rhythm of moving shapes to create expressive forms of the art of animation.

### **Learning Outcomes**

- Apply all fundamental animation principles into personal work.
- Appreciation of independent and commercial animation techniques as a means of visual expression.
- Management and planning of time required to execute animation projects professionally.
- Demonstrate skills in the art of animation expression through choreographed movements of shapes and images.

**Prerequisites:**

MA or MFA animation status

**Course Description**

Students in this course will rigorously investigate the foundational aspects of animation through traditional and digital methods. Basic principles including timing, spacing, rhythm, and movement will be analyzed. Students will experience how the process of making work can be used to generate emergent ideas, and be challenged to push the art form beyond the accepted conventions.

Hands-on knowledge of the animation foundational concepts, including timing and spacing, staging, weight, anticipation, observation, squash and stretch, and arcs. Appreciation of the pedagogical value of classic animation exercises, including the bouncing ball, sack of flour, and walk cycle. Familiarity with basic animation processes, including straight-ahead, pose-to-pose, extremes and in-betweens, morphing, ease out and ease in. Experience with the timing and spacing of effects animation.

We will use simple, hand-drawn animation, mostly in *Flash*, to explore the methods developed by traditional and experimental animators. Each week's class will follow a similar schedule:

- Critique of homework assignment
- Discussion of readings, viewings, concepts, & techniques
- In-class exercises exploring new concepts & techniques
- Assignment of homework incorporating the concepts & techniques explored in class

The animation concepts, techniques, and exercises will include the following:

- Straight-ahead metamorphosis animation
- Arcs of action
- Slow ins and outs
- Squash and stretch
- Anticipations of action
- Accents and overshoots
- Follow through action
- Overlapping and secondary action
- Vibrations and settles
- Pose-to-pose animation
- Walks
- Runs and jumps
- Winged animation
- Lifting and weight
- Fire and Smoke
- Water and Splashes
- Lightning effects

We normally use *Flash* software to animate. I would like to try using TV Paint this quarter – it is the fastest and most direct way to visualize the concepts. It is not necessary to draw well in this class; many of these assignments may be completed using stick figures. The principles covered in this class will apply to all styles of future animation production.

## Course Resources

### Suggested Texts:

- *The Animator's Survival Kit (ASK)*, Second Edition, by Richard Williams. Faber, 2009.
- *Timing for Animation*, Second Edition, by Harold Whitaker and John Halas. Focal Press, 2009

### Online Software Reference:

- **Lynda.com** for all work in *Flash*, *TV Paint*, & *AfterEffects*

### Video Reference on D2L:

**CoTube** will link you to the entire *Richard Williams Animation Masterclass* videos and files. This link is on the bottom right side of the D2L home page. This is an incredible resource that passes down the craft developed during the golden age of Disney and Warner Brothers, and you will be expected to watch these videos outside of class to prepare for lectures.

## Proposed Schedule

Class 1, Sep 12: Transformational metamorphosis, slow ins and outs

Class 2, Sep 19: Bouncing ball, arcs of action, squash & stretch, vibrates

Class 3, Sep 26: Anticipations, overshoots and accents, exaggerated impact

Class 4, Oct 3: Follow-throughs, smears

Class 5, Oct 10: Lifting and weight

Class 6, Oct 17: Overlapping and secondary action, vibrates

Class 7, Oct 24: Walks

Class 8, Oct 31: Runs & Jumps

Class 9, Nov 7: Water splashes, drips

Class 10, Nov 14: Smoke, Fire, Rain FX

Class 11, Nov 21: Repeating Cycles

Nov 18: Final Critique, 6:00 – 8:15pm

This schedule is subject to change throughout the semester and will be adapted to fit the needs of the students.

## **Grading:**

- 10% - Participation in class discussions and attendance
- 90% - Animation Assignments

A=100-93,A-=92-90,B+=89-88,B=87-83,B-=82-80,C+=79-78,C=77-73,C-= 72-70,D+=69-68, D = 67-63, D- = 62-60, F = 59-0.

**A** indicates excellence, **B** indicates good work, **C** indicates satisfactory work, **D** work is unsatisfactory in some respect, **F** is substantially unsatisfactory work.

Specific grading criteria will be noted with each assignment.

All assignments must be submitted to D2L one hour before class begins. Late assignments will not be available for critiques. Grades will be lowered for late submission, per D2L notes. No credit for assignments submitted more than 10 days late.

## **Attendance Policy:**

Because this class only meets once a week, you may not miss more than one class. Any student missing more than 2 classes will receive an automatic grade reduction of at least one full grade. If you have any personal or medical issues, you must contact the office of the Dean of Students to request an excused absence. They will contact me directly. Do not request an excused absence from the instructor.

You are responsible for any missed lectures and assignments. If you miss a class, it is still your responsibility to turn in the assignment on time. We have very tight deadlines that are in place to benefit you and your projects. Lecture notes alone will not make up for missed work.

Do not miss the final class and critique; this will result in a reduction of your participation grade. If for any reason you know you will miss the final class, you must contact the Dean of Students before the final class. Excuses given after the fact will not be accepted.

You must request an incomplete to the Dean of Students before the 10<sup>th</sup> week of classes begin. Documentation may be required. I will need to approve an incomplete request based on your course work, attendance, and participation.

Constantly arriving late will significantly lower your participation grade (to 0)

## **Participation**

Each week we will begin with a class critique of the assignments. Students are expected to participate in constructive criticism and discussion of each other's work. It is important to understand how well you are able to express your ideas through these exercises. This is the most effective way to learn the principles of animation.

### **Additional Information:**

- Use of cell phones in the class and the lab is prohibited. Please turn your phone off before entering class.
- Working on other class projects during class is not allowed. The first time will be a warning. After that, your participation grade will be lowered significantly – to “0.”

### **Changes to Syllabus**

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

### **Online Course Evaluations**

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in [CampusConnect](#).

### **Academic Integrity and Plagiarism**

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/> If you have any questions be sure to consult with your professor.

### **Academic Policies**

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the [University Academic Calendar](#). Information on enrollment, withdrawal, grading and incompletes can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>.

### **Students with Disabilities**

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at:

Lewis Center 1420, 25 East Jackson Blvd. Phone number: (312)362-8002 Fax: (312)362-6544 TTY: (773)325.7296

