# University of the Incarnate Word

ANGD 2331 • Principles of Animation
SPRING 2019 T/R 1:30PM-4:15PM(Sec 01)

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**Course Overview:** This special topics lecture/studio course examines the basic principles of believable animation using prebuilt rigs. Emphasis on solid keyframing techniques.
**Outcomes:** At the end of this course, be able to use Maya's animation tools to effectively create sound keyframe animation. Emphasis on the principles of animation.

**Audience:** This course is a freshmen level requirement for students majoring in 3D Animation & Game Design.

| Date | Lecture | Exercise | Assignment Due |
|------|---------|----------|----------------|
| 1/15 | Intro to animation, types of animation | 2D ball bounce Maya test | |
| 1/17 | Timing & Spacing/ Slow In & Slow out *Importance of Breakdowns* | 2D Bouncing ball in place loop | spacing chart (basketball type) & 2d ball animation test |
| 1/22 | Timing & Spacing/Slow In & Slow Out Recap | 2D Ball bounce to a settle (basketball VS bowling ball) | |
| 1/24 | Maya Animation, Squash & Stretch | - 3D Ball bounce in place with squash & stretch  Pole fall with squash stretch | 2D Bouncing ball animation Heavy (should come to a settle >=3 bounces) |
| 1/29 | Intro to Graph editor –recap: timing/spacing/squash/stretch | - One bounce hit a wall | 3D ball bounce in place to a settle |
| 1/31 | Anticipation/ Drag/Overlapping action arcs cont. | - normal ball bounce (add tail to one bounce) in place to a settle  Shoulder fall/settle | 3D Ball bounce across screen to a settle (include reference ) |
| 2/05 | Critiques / 3D fox jump demo / recap | 3D fox jump in place | Ball jump across env with a 2d tail |
| 2/07 | Overshoots - Graph editor techniques/ critiques | - 2D Pendulum swing in place | Fox jumps thru scene ref (20pts)Fox jumps thru new scene |
| 2/12 | Straight ahead & pose to pose animation | - 3D Pendulum swing  - Spine break up | 3D platform with a 2D pendulum swing on at least 2s |
| 2/14 | Solid Posing/Solid Drawing & Critiques | - Three poses  - one flour sack jump | 3D Pendulum swing thru env. |
| 2/19 | Exaggeration/reversals | - One flour sack fall  - exaggerated poses | Flour sack jumping thru scene(>=3jumps) |
| 2/21 | Pose to pose/Anim Walk blocking demo | - Jump in place  - walk in place | Flour sack fall with dead weight |
| 2/26 | Breakdowns!! (how they can change a walk) | - Arm Drop with different breakdowns | Flour Sack Walk Reference & main animation |
| 2/28 | Weight Shift | - Ball Side step  - One leg chop off | Ball Walk |
| 3/5 | Critiques | Arm drop | Ball turn around |
| 3/7 | Ball bipedal obstacle | Ball kick | Spidey turn around |
| 3/11-3/13 | SPRING BREAK | SPRING BREAK | SPRING BREAK |
| 3/19 | Critiques | Group critiques | Ball Bipedal obstacle |
| 3/21 | Arm movements / Full body walk | - Arm swings  add arms to jump anim | Jump loop & settle x2 ( in place) |
| 3/26 | Full body walk loop breakdown/demo | - Full body walk in place | Jump gap with anticipation and settle |
| 3/28 | Full Body walk animation polish | Animation cleanup File (walk) | Full body walk loops x2 ( in place) |
| 4/2 | Anim Recap | Fall backwards | Full body walk forward ( 4 strides) |
| 4/4 | Baseball throw blocking | Polish Exercise | Baseball throw blocking |
| 4/9 | Baseball throw polish | Tennis Serve Blocking | Baseball throw polish |

| Date | | | |
|------|------|------|------|
| 4/11 | Tennis serve revision demo | Group critiques | Tennis Serve animation pass #1 (auto tangent) |
| 4/16 | Push | Door knob pull | Tennis serve animation final Polished |
| 4/18 | Push part 2 | Group critiques | Push reference & auto tangent blocking (breakdowns) |
| 4/23 | Push polish critiques | Heavy lift | |
| 4/25 | Recap | Hop – Torso+legs | Push polish |
| 4/30 | Final Project | Recap | Full Body Hop |
| 5/02 | Final Review | Work on Final Project | Final Project: Walk Cycle |

**Grading Activities:** Your final grade will be based upon attendance, exercises & quizzes (15%) and projects (70% of total grade). The final project will count for 15%. Your grade will be based upon the percentage of 100 pts you have earned.  100-90=A, 89-80=B, 79-70=C, 69 and below =F.

**Output:** Render using 720 HD in your Render Settings.

**Attendance:** Attendance is mandatory.  After one absence, each additional absence will result in a letter drop in your final grade.

**Projects** Make every project you turn in count.  No late assignments accepted.

## Academic Honesty Statement: In accordance with the UIW Student Handbook, academic dishonesty includes but is not limited to: Cheating on test, exams, or lab work. Plagiarism of another's work including models or textures. Using other's work as your own by counterfeiting it. Unauthorized reuse of work (the turning in of the same work to more than one class without consent of instructors involved). Theft or circulation of tests, quizzes, or answer sheets. Involvement of collusion (unauthorized collaboration with another) to violate a provision of the Code of Academic Integrity.

In order to maintain a high level of work and integrity in our classes, all sanctions will be pursued an enforced in the case of academic dishonesty.

**Class Absences for Religious Observances**: The University of the Incarnate Word welcomes persons of diverse backgrounds and is therefore committed to providing reasonable accommodations for students wanting to attend religious observances and who will miss class. Students must inform instructors at least two weeks prior to attending a religious observance. Students use the form found in the UIW Student Handbook & Student Code of Conduct to request accommodations from the instructor.

**Disability Accommodations:**
The University of the Incarnate Word is committed to providing a supportive, challenging, diverse and integrated environment for all students. In accordance with Section 504 of the Rehabilitation Act – Subpart E, Title III of the Americans with Disabilities Act (ADA), and Title III of the ADA Amendments Act of 2008 (ADAAA), the University ensures accessibility to its programs, services and activities for qualified students with documented disabilities. To qualify for services, the student must provide Student Disability Services with the appropriate documentation of his or her disability at the time services and/or accommodations are requested.

**Pregnancy Accommodations:**
Under the Department of Education's (DOE) regulations implementing Title IX of the Education Amendments of 1972, the University does not discriminate against any student on the basis of pregnancy or pregnancy related conditions.

To request reasonable accommodations for disability, temporary disability (e.g., injury, surgery) or pregnancy, please contact:

Student Disability Services
4301 Broadway CPO 286
Administration Building – Suite 105
San Antonio, TX 78209
(210) 829-3997
(210) 829-6078

www.uiw.edu/sds

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Unlawful discrimination has no place at the University of the Incarnate Word. It violates the University's core values, including its commitment to equal opportunity and inclusion, and will not be tolerated. The University of the Incarnate Word prohibits sexual misconduct, that can include: (1) sex and gender based discrimination; (2) sexual and sex and gender based harassment (including a hostile environment based on sex or gender); (3) sexual assault; (4) sexual exploitation; (5) stalking; and (6) relationship violence (including dating and domestic violence). For more information, or to report an incident, please visit www.uiw.edu/titleix.