San José State University

Design Department - College of Humanities and Arts
ANI 128a – 01 Digital Animation I, Fall 2018

Course and Contact Information

Instructor:	Michelle Meeker
Office Location:	ART 213
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Office Hours:	MON and WED 6:20 to 6:50 pm by appt.
Class Days/Time:	MON WED 3:00 to 5:50 pm
Classroom:	ART 224 (Mac Lab)

Course WebPage

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on the Canvas learning management system course website. You are responsible for regularly checking our class page on Canvas to learn of any updates.

In addition, you will find excellent resources and complementary materials for our class here:
https://ani128a.wordpress.com/
Please bookmark the site above on your browser and consult it often!

Course Description

In this class we will focus our attention on how to create believable movement by applying the traditional principles of animation to 3D digital characters, focusing on body mechanics. There is also special emphasis on the building blocks of an animated scene, and the work flow from planning phase to final animation, with focus on shot design and blocking. The project assignments will be introduced through hands-on demos and lectures, and will be completed by work done in class and continued at home. Short films and scenes of feature animated and live action feature film will be used to illustrate the many concepts studied in this class.

Learning Outcomes

By the end of this class students should be able to:

- Understand well the Maya workflow, and how to take a shot from design to final phase

- Know how to block a shot using stepped and/or copied pairs techniques

- Animate broad action with solid body mechanics, appropriate for a intermediate level

- Know how to apply the traditional principles of animation in order to produce believable movement
  –Introduce storytelling and character development to the scenes
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Required Texts/Readings

The Animator's Survival kit By Richard Williams Published by Faber and Faber ISBN 0-571-20228-4
Cartoon Character Animation with Maya by Keith Osborn ISBN: 9781474238588
Quick Sketching with Ron Husband by Ron Husband ISBN: 9780415823340

Suggested additional text:
Animation: The Mechanics of Motion by Chris Webster

Class Guide (PDF given in class)

Other equipment / material requirements

RIGS:

Body Mechanics mega pack:

https://gumroad.com/l/xhRK#

We have a discount of $10 so students can buy all characters for $30. In order to get the discount

students have to write SJSU when checking out.

Sony Zombie Rig:

https://secure.sonypictures.com/animation/hotelt/zombierig/videosubmissions/

Pink Panter:

Rig http://www.cgmeetup.net/home/pink-panther-rig-free-maya-rig-3d-character-rig/

Mr. Buttons: https://www.bloomsbury.com/cw/cartoon-character-animation-with-maya/student-resources/

mr-buttons/

ELECTRONICS AND SOFTWARE:

- A USB flash drive or external drive for storing DATA and transporting files to and from school;
Please do not work directly from your external drive when you are in computer lab. Copy your files locally and use
the lab's computers. When you are done, copy your work back to your external drive for storage and transport.

- We will be using Maya 2018 and Maya 2018. This version is available in all computers in the lab. If you need
your own copy please make sure to download Maya 2016 or 2018 (not 2017). Downloading is free for SJSU
students on the Autodesk site.

- You will be required to shoot video reference at 24fps for some of the assignments. Please be prepared to do so,
making sure you have some kind of device to record video (smart phone, video camera, flip camera etc).Download
Filmic Pro (or similar) for your smart phone. This software will allow you to shoot video at 24fps which is the frame
rate required for this class.   https://itunes.apple.com/us/app/filmic-pro/id436577167?mt=8

- As part of the SJSU Animation/Illustration program, in this class, as well as every other, it is expected that you
possess the Adobe Creative Suite and will utilize it at some point in executing your projects for this class. It should
be installed on your laptop along with the Microsoft Office Suite. http://its.sjsu.edu/services/software/

ART SUPPLIES:

- Sketch book and pencils for drawing.
- 2 colors of dry erase markers

Attendance

Students are expected to attend class regularly. Lateness of over 15 minutes counts as an absence. Students with 3
or more consecutive non-justified absences will most likely fail the class – in three weeks we will cover a lot of
ground and if you miss three consecutive weeks of classes it will be really hard to catch up later. **Please send me an
email** (preferably in advance) if you are unable to attend class.

NOTE that University policy F69-24 at http://www.sjsu.edu/senate/docs/F69-24.pdf states that "Students should
attend all meetings of their classes, not only because they are responsible for material discussed therein, but
because active participation is frequently essential to insure maximum benefit for all members of the class.
Attendance per se shall not be used as a criterion for grading."

Course Requirements and Assignments

  Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/ studying, or course related activities, including but not limited to internships, labs, and clinical practica.   ther course structures will have equivalent workload expectations as described in the syllabus.

More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

Please schedule time to work in Maya daily. Animation is like playing a musical instrument – you will need daily practice. I want to stress that if you don't practice daily, you will mostly not get good results. If you really can't practice daily, try every other day. What really doesn't work is to work on Maya the night before class, just enough to do the assignments. To pass this class you will have to put at least 9 hours per week into your assignments and practicing Maya.

There will be weekly assignments and required readings. Students should complete the weekly assignments and have them assembled as a demo reel at the end of the semester. Chosen assignments and demo reel will be graded, as well as participation in class.
Students are expected to complete and hand in every assignment for the course. Deadline for assignments will be strictly observed. STUDE   TS ARE RESP   SIBLE F R   EEPI G A DIGITAL C P   F ALL SCE   ES A   D ASSIG   ME TS. PLEASE BAC UP   UR W R   FTE .

Look for help online or with your friends. Try to plan with class peers to get together in the lab for studying this way you can help one another. If you encounter problems, try to trouble shoot, thinking of possible reasons for things to be not working. If after 10 minutes trouble shooting you don't get results, call or email friends, or look online there's plenty of Maya forums and maybe someone out there has had exactly the same issue as you. Basically, don't suffer alone there's a lot of people out there trying to figure the same stuff as you.

University Policies

General Expectations, Rights and Responsibilities of the Student
See University Policy S90–5 at http://www.sjsu.edu/senate/docs/S90-5.
pdf. More detailed information on a variety of related topics is available
in the SJSU catalog, at http://info.sjsu.edu/web-dbgen/narr/catalog/rec-
12234.12506.html.

Dropping and Adding

Students are responsible for understanding the policies and procedures
about add/drop, grade forgiveness, etc. Refer to the current semester's Catalog
Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/
drop deadlines can be found on the current academic year calendars document
on the Academic Calendars webpage at http://www.sjsu.edu/provost/
services/academic_calendars/. The Late Drop Policy is available at http://
www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of
the current deadlines and penalties for dropping classes.
Information about the latest changes and news is available at the Advising
Hub at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material
University Policy S12-7

Academic integrity

University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/
docs/S07-2.pdf requires you to be honest in all your academic course work.
Faculty members are required to report all infractions to the office of Student
Conduct and Ethical Development. The Student Conduct and Ethical Development
website is available at http://www.sjsu.edu/studentconduct/.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability,
or if you need to make special arrangements in case the building must be
evacuated, please make an appointment with me as soon as possible, or see
me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/
president/docs/directives/PD_1997-03.pdf requires that students with disabilities
requesting accommodations must register with the Accessible Education
Center (AEC) at http://www.sjsu.edu/aec to establish a record of their
disability.

Accommodation to Students' Religious Holidays

See University Policy S14-7 at http://www.sjsu.edu/senate/docs/S14-7.pdf.

Student Technology Resources

Computer labs for student use are available in the Animation and Illustration program computer lab, in room ART 224. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

SJSU Peer Connections

Visit Peer Connections website at http://peerconnections.sjsu. edu for more information.

SJSU Writing Center

Please visit the Writing Center website at http://www.sjsu.edu/writingcenter.

SJSU Counseling Services

The SJSU Counseling Services is located on the corner of 7th Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling Services website at http://www.sjsu.edu/counseling.

Grading Policy

There will be weekly assignments and required readings.

Students are expected to complete and hand in every assignment for the course. Deadline for assignments will be strictly observed. STUDENTS ARE RESPONSIBLE FOR KEEPING A DIGITAL COPY OF ALL SCENES AND ASSIGNMENTS. PLEASE BACKUP YOUR WORK OFTEN.

Grading: This is a letter grade credit course.

Grading breakdown

Grades will reflect a student's overall engagement with the course material from throughout the term, as determined by factors such as the quality and creativity of assignment work, class attendance, class participation, progress and effort. Students are responsible for maintaining an updated record of all completed assignments. Feel free to talk with me about any grade at any time in the semester.

Participation: 10%
Step or Turn around project: 10%
Jump: 10%
Throw 20%
Weight: 20%
Final Reel 30%
Participation will be graded based on how the student interacts with teacher, students and course materials during class; students who ask questions, participate in every class, participate in critiques with comments and suggestions, is likely to get a good grade for participation and effort.

Grades will also reflect **the quality of assignment work,** and effort.

BACK UP YOUR WORK OFTEN!!!!!!!!! The teacher is not responsible for files lost, and if you loose files before deadlines your grade will suffer. Please backup your work weekly of every couple of days at least! In addition, save often and use Maya's incremental save to save your scenes! Students are responsible for maintaining an updated record of all completed assignments.

OBS: Student will only be granted an incomplete grade if they are going through exceptional situations that required them to miss a majority of classes, or important class milestones, for exampel experiencing a compelling family emergency and/or life crisis. If you receive an incomplete you have to complete the work on your own and have one year to submit all final materials for consideration or your grade reverts to an FG.

Grading Percentage Breakdown	Please note:
94% and above = A	
93% - 90% = A-	A = Excellent or Superior; or top 10% (93 to 100) = 4.0
89% - 87% = B+	B = Above Average; or second 10% (83-92) = 3.0
86% - 84% = B	C = Average; or third 10% (77-82) = 2.0
83% - 80% = B-	D = Below average, minimum passing grade (69-76); or
79% - 77% = C+	fourth 10% = 1.00
76% - 74% = C	F = Failure or Exceptionally Poor; or bottom 60% (0-68)
73% - 70% = C-	= 0.00
69% - 67% = D+	
66% - 64% = D	
63% - 60% = D-	
below 60% = F	

Students can consult their grades on Canvas for this class on an ongoing basis.

Classroom Protocol

Failure to comply with these rules will result in a one week expulsion from the lab for
every student present at the time of the offense
1. Food is prohibited; if you bring foot or drinks to the lab, keep it at the table on the back of the lab, and make sure
to clean everything at the end of the class. That includes empty bottles, containers, plastic forks and knives etc.
2. Only students registered in digital classes or BFA are allowed in the lab
3. No internet browsing is allowed during class time. That includes social network sites, any kind of chat or instant
messages, news, youtube or any other site at all. Students caught browsing the internet during class will be
promptly removed from the lab.
4 A notebook and taking notes is mandatory during all lectures or when teacher is explaining a topic or giving
assignment guidelines.
5. The lab is for digital class related work only (No painting, charcoal rendering,
sculpting, massaging, etc...)
6. No inappropriate imagery on the computers nor dry erase board
7. Headphones only; no sounds audible to other students allowed
8. Do not disconnect, attach, rearrange, or install anything on the computer systems
(USB and external drives are permitted)
9. The lab doors must remain closed and locked at all times
10. Cel phones should be turned off in the lab

University Policies

Please read univeristy policies here:

http://www.sjsu.edu/english/facultycorner/rqrdsyllabiinfo/

ASSIGNMENTS

REQUIREMENTS AND GUIDELINES PRESENTATION AND FORMAT

All animation scenes should start, from blocking, with a set composition including a camera with aim, and correct aspect ratio. Please consider your composition carefully, and make sure the camera angle and staging is adequate to the scene you have in mind. From day one I want to see playblast movies from the correct camera angle.
All Maya final assignments (including poses, quick studies and animations) should be rendered in the due date in HD 720 aspect ratio. They should include shadows and be well presented, with the character in high res (smooth skin) and with appropriated lighting.

Please note: WIP passes do not need to be fully rendered (such as blocking and refining passes). But please always fully render your final passes. **All final animations should be fully rendered in the correct aspect ratio, and with shadows for their due dates.**

ORGANIZATION
Please use maya to create a project for each animation project you will be working on. Your files will be organized within the folders created by Maya. When working on the lab, just copy your project directory to the computer in the lab, open Maya and "set project" to your folder. Work on your scene, and copy the project back to you flash or external drive.

Keep your files organized and name them with your firstNameLastname. Use numbers to save different versions of your animation – this way you can go back to a previous version if one version gets corrupted, preventing you from loosing work. The best way to do that is using the automatic "incremental save" in Maya.

BACK UP YOUR WORK
Back up often. You should have always a copy of your projects in your flash or external drive, and in your own desktop or laptop computer. If you have some extra cash, you may want to invest on a dedicate external drive for backing up your scenes. It's never a bad idea to be on the safe side with your data!

DEADLINES
Deadlines for all assignments will be strictly observed. Try your best to complete projects within the deadline. Assignments are planning with a specific deadline in mind for a reason. Please keep the deadlines in mind when organizing your homework schedule. This class requires a minimum or 10 hours a week dedicated to homework. Any less than that will hurt the quality of your work. You do need to put in the hours! In some weeks, expect to put MORE than 10 hours for completion of all homework.

WORK COLLABORATIVELY
Animation is a very collaborative field. Even if you are a shy person, try to reach out for your classmates. Ask questions in class, connect with your classmates and ask them to give feedback on your work, or to help you when you are stuck. Help others when you see they need help. Doing this together will be more fun, and everybody will learn a lot more.

WEEKLY SCHEDULE

Subject to changes! Please check Canvas for the most current assignment details.

Week 1 – kick off of course

Day 1

Greeting and Introductions (get to know the people!)
What this course covers?
Our resources: Canvas course site, Google Drive for uploading homework, Resources site and Class Guide
Explanation of our 4 weekly assignments and How it works:
pose, shot pick apart, quick study and animation scene

Important Topic: POSES
Importance of poses for animation and what to look for when creating a good pose (see Class guide)

Assignments:
(due in week 2)

1. Buy supplies and materials
2. Create a free account at **toggl.com** for time management
3. Read the Class Guide up to the BLOCKING section (no need to read the BLOCKING section, but please read everything that came before that)

SHOT PICK APART:
Select and get 3 feature films (3D animation) and copy them to your computer, in preparation for shot pickapart.
We recommend films from Disney, Sony, Dreamworks, and Pixar (preferably made after 2008)

POSES:
Look for videos and reference of Magicians
Use your sketch book to sketch some cool poses for a Magician
Create a great pose for a magician character
Think of a very expressive pose that conveys something about the character (pride or defeat, for example), or that clearly shows a story moment.

NOTE: make sure to track time when doing the pose assignments
Layout in photoshop with the rendered pose + silhouette + reference

QUICK STUDY:
Let's do a little refresher on how to use the Graph editor?
Study the two tutorials from Victor Navone, Splinophylia I and II
There's a link for his tutorials in our resources site, under Technical Stuff:
https://ani128a.wordpress.com/2015/09/10/let-victor-navone-help-you-with-the-graph-editor/

SCENE ASSIGNMENT:
none

Week 2

<u>Review</u>
Review pose assignment from last week, check TOGGL screen grabs, compare notes on how long it took;
Did everybody create a PROJECT? Any issues with that?

<u>TOPIC: BLOCKING, TIMING, POSES</u>
<u>IN CLASS:</u>
Overview of what is BLOCKING and why blocking is important to animation
Compare 2D to 3D: key pose drawings in 2D tare the equivalent to the key frames aligned in the graph editor in 3D. Each column of key frames corresponds to one key drawing

Show example: Magician Greeting
Maya file (entire project) is available on google drive, please copy to your Hardrive before opening

Overview the magician scenes and show examples of:

Blocking in Stepped mode;
Blocking in copied pairs using flat splines
Blocking in copied using linear splines
Copied pairs using auto splines

What is the difference between stepped mode and copied pairs?
Explain **holds** and **transitions** using example of magician scene

Assignments (due on week 3, except for quick study <u>which is due next class</u>):
1. Read the "Blocking section" of the Class Guide
2. Please **<u>track time using TOGGL</u>** to track the time for EACH of the following assignments:

POSE (due in week 3):
      A character standing up, maybe waiting for the bus. Create 3 different poses, each one showing a different attitude, mood or character trait. Pay attention to the weight: which foot is supporting the weight of the character? Please show silhouette and reference for each one of them. You can layout the 3 poses on the same jpg image.

SHOT PICK APART (due in week 3)
find a scene that you think it's a good example of a shot with clear holds and transitions (short, no longer than 100 frames. Less is better!)
Try to understand why the animator chose these specific poses. Do the poses help the viewer to understand the story or the character personality/mood/motivations? How? Count the frames for each hold and each transition. Sketch the poses on your sketch book and write down the frames

numbers for each hold and each transition. Bring the scene to class to share with your classmates.

QUICK STUDY: (attention: the quick study is due next class!!!!)
Change the timing in the magician scene given in class.
Is there any pose that should last longer? Or maybe you want to shorten a pose?
How about the transitions? Use the Dope Sheet or the Graph editor to modify the timing of the magician scene.
If you want, you can also change the poses and make them more interesting.
What about adding a breakdown for the transition between the poses?
What else can you do to make the BLOCKING more interesting?
How about creating a small anticipation before taking the hat off?
*whatever you do, keep it in BLOCKING, do not polish it. You can add more poses, improve the poses that are there, or simply change the timing.
Use the file magician01.ma
Show: a playblast of your animation, plus a **screen grab** of your graph editor with all body parts of the char selected
*Please note that the hand is permanently attached to the hat. To get the hand in and out the hat would be a bit more complicated and it would require a different setup. So, whatever you do, keep the hand connected to the hat.

SCENE ASSIGNMENT (due in week 3):
Magician touching the hat with his wand... trying to make something appear?
PLAN A SCENE: act it out, thumbnail a few poses, shoot video reference and come up with a details plan on paper.
(simple, short scene. Max 70 frames)

Then BLOCK a scene in which the Magician touches the top hat with his magical wand, trying to make something appear:

Focus first in creating appealing poses, and then use the copied pairs method to make sure the timing of your holds and transitions are looking nice. Experiment with more time on holds and less time on transitions and vice versa, until you find something that you like. BLOCKING ONLY!!! Do not polish the scene, and focus on creating a great blocking for the scene. Use the file magician21.ma

Show:
A **playblast** of your blocking + A **screen grab** of your graph editor with all curves selected

What else you need to know in order to do these assignments?

-how to "select ALL", either using the picker or using a "select all" button (or "All button"
-how to do a screen grab (to take a picture of your graph editor and or your TOGGL weekly report)
-how to shoot a playblast with good presentation (clean, good resolution etc)

Topic: CENTER OF GRAVITY, BALANCE, WEIGHT SHIFT

Review
Review and discuss assignment from last week;
Check TOGGL screen grabs – discuss: are you succeeding in tracking your time? Is your time improving?

Important new Topic: Center of gravity (balance and weight shifts)
Read about weight shifts and balance on your Class Guide (at home)

Weight shift: why we HAVE to shift our weight from one leg to the other?
Where the weight needs to be in order for us to raise one of our feet?

Think about it:
How flexible is our feet? What happens to the feet when we shift weight and change the position of the feet?
How do we raise our feet and how we usually put it back? Which controls should we use to animate the feet?
Always be aware of the first contact and last contact when animating steps; Make sure the amount you raise the heel is related to the position of the COG in relation to the foot.
Once you figure out the relationship between the two feet and the COG. Think about the Torso. How the torso reacts to the weight shift of the COG? Investigate the concept of "Counter balance"
When you are animating weight shifts, remember to add arcs (for example on the COG between poses)
Also, remember to add overlap on torso when you are polishing your animation.

Assignments(due on week 4):
1. Read the whole section "Center of Gravity, Weight Shifts and Balance" section of the Class Guide
2. Please **track time using TOGGL** to track the time for EACH of the following assignments:

SHOT PICK APART
Select a scene in which a character is OFF BALANCE. Bring the scene to class to share with your classmates

POSE
After reading the Class Guide section on Balance, create one pose inspired by everything you read. The idea of the pose is "balance". Think of the COG and the support of the weight, and make sure your pose has a great line of action, is asymmetrical, expressive, appealing and yet completely in balance.

QUICK STUDY
Shoot video reference with a close up of your feet going from tool to heel etc. Animate a close up of the feet showing the flexibility and exploring the controls to move the different parts of the feet (heel, toe, ball of the feet)

SCENE ASSIGNMENT (due in week 4):
A Big Step to the side, or a 180 degrees turn.
(Max 120 frames)

Think of a character and a context for your scene. Who is the character? Why he/she is turning around or stepping to the side? What is the situation and mood? Start your scene with a pose that holds still for at least 20 frames, and end your scene also with a hold pose.

Choose one of the class characters:
1. video reference
2. planning of paper
3. defining timing
4. blocking first, make sure to have holds in beginning and end. Use your "All button" and make sure to keyframe all body parts in each pose!!!! Your blocking should include feet positions and feet flexibility
5. After you have the poses working, play with the timing, until you find the best timing for the shot.
6. Show playblast of blocking and screen shot of graph editor

BLOCKING ONLY!!! Do not start polishing!!!

Week 4

Topic: MOVING HOLDS, STEPS, CENTER OF GRAVITY AND WEIGHT SHIFTS

Review
Review and discuss assignment from last week;
Check TOGGL screen grabs – discuss: are you succeeding in tracking your time? Is your time improving?

Review blocking of step shot, and pay attention to Center of gravity, balance and weight shifts. They should be all correct! Also, how is the feet contacting the floor? Pay attention to first and last contact of the feet with the floor.

New Topic: POLISHING and MOVING HOLDS
This week we will start to figure out how to polish a shot. Let's think on what we can do to make transitions more fluent, and holds not so still. Maybe we can start by turning holds into moving holds, and by adding arcs and overlapping to the transitions. The idea is to loosen up the character.
https://ani128a.wordpress.com/category/polishing/

Assignments (due on week 5):

2. Please <u>track time using TOGGL</u> to track the time for EACH of the following assignments:

SHOT PICK APART
Moving holds. Selected a scene from a movie in which the character is barely moving at all, and still we know it is alive. What is moving? How much? What is the effect? What do you think the animators did in order to achieve this effect?

POSE
Balance. Think of situations/professions/characters that defy balance and create a balanced pose based on that. For example circus artists, dancers, etc...

QUICK STUDY

Choose one of your poses in the previous poses assignments and turn it into a moving hold – that is, keep the character alive by animate very limited/little movements but keeping him/her in the same pose the whole time.

SCENE ASSIGNMENT (due in week 5):
Polish your **Step** or **Turn Around** assignment. Make sure to keep your first and last holds alive, turning them into a moving hold. Add arcs and overlapping action to the transitions. Loosen up the character and bring it to life. This is the final polishing pass on your **Step** or **Turn Around** assignment. Final shot due next week .Please light your shots and use shadow.

Week 5

<u>Review</u>

Review polishing of step shot. How was polishing? Easy, or difficult? What were the problems you encountered? Discuss in class what worked and what didn't.

Review Topic: Polishing
Discuss techniques. Tips and Tricks

New Topic: Jump

Assignments (due on week 6):

1. please read tthe section on JUMPS in the Richard William Animator's Survival Kit Book (pages 212-216)
2. Please <u>track time using TOGGL</u> to track the time for EACH of the following assignments:

SHOT PICK APART
Jumps! Find a scene in which someone is jumping. Analyze the poses. Is there an anticipation pose? How long does the char holds the antic pose? How contrasting is the anticipation to the throw pose? What happens to the weight? Are there any weight shifts? How long the character spends in the apex? Is there a slow down there? Does the character uses his/her arms to propulse the body forward? Sketch the main poses, mark the line of action, and count frames of the main holds and transitions.

POSE
Jumping. Create a pose of someone jumping – it can be the anticipation before the jump, the apex moment, or the impact on landing. Use your imagination -we want a pose that is pushed and appealing!

QUICK STUDY

This study is not going to be so quick – sorry!!!

Choose <u>one</u> of the jumps on page 214-15. Re-create the jump using one of the Long Winter Characters. Follow the poses and timing from the book as closely as possible. Blocking only: re-create the poses first with the timing proposed in the book. Make sure you are using the "All" button and that your are key framing all body parts in each pose. Playblast and check if it works. Then, using the dope sheet of the graph editor, try to make the holds longer, or change the timing to make the shot even better... If you feel the need, tweak some of the poses and do whatever you need to do to make this blocking really work.

SCENE ASSIGNMENT (due in week 5):
Make the jump scene that you just blocked yours. Modify some of the poses, modify the timing, make it more interesting. If you want, add a set, a background image or props to the scene.

Week 6

TOPIC: SPINE FLEXIBILITY, SPINE REVERSALS

Review
Review final polishing of step shot. How was polishing this time? It is getting easy? What were the problems you encountered? Review Richard Williams Jump quick study. Did you have to change time or poses to make it work?

Assignments (due on week 7):

1. please read and study the section on FLEXIBILITY in the Richard William Animator's Survival Kit Book (pages 217-245)
2. Please <u>track time using TOGGL</u> to track the time for EACH of the following assignments:

SHOT PICK APART
Throwing! Find a scene in which someone is throwing a heavy object at someone else, or at a wall etc. Analyze the poses. Is there an anticipation pose? How long does the char holds the antic pose? How contrasting is the anticipation to the throw pose? What happens to the weight? Are there any weight shifts? Sketch the main poses, mark the line of action, and count frames of the main holds and transitions.

POSE
Throwing. Someone throwing something. How heavy or light is the object? Make sure you give a hint of the weight of the object in the pose. Pick the moment when the object is just leaving the hand of the character. Throwing hard is preferable, we want a pose that is pushed and appealing!

QUICK STUDY
Spine flexibility.

Work on the overlapping of the spine when your character moves to the side no need to animate feet, please frame your character from the waist up. The COG should be driving the movement, and the rest of the spine overlaps (including neck and head). You can make the spine more "rubbery" or less, but make sure to animate so that the spine seems to be FLEXIBLE.

SCENE ASSIGNMENT (due in week 5):
Jump Shot: FINAL, please present it rendered with shadows

Week 7

TOPIC: THROWS, CONSTRAINTS

Assignments (due on week 8):

1. Read the Notes on Polishing on our resources site.
https://ani128a.wordpress.com/category/polishing/
2. Please track time using TOGGL to track the time for EACH of the following assignments:

SHOT PICK APART
none

POSE
Work on a pose that shows a great anticipation pose before a throw

SHOT PICK APART
Find a shot that has a great anticipation pose before a strong action

QUICK STUDY
Read about constraints in the class guide.
What's the difference between constraints and parenting?
Try the tutorial on constraints on the resources site
https://ani128a.wordpress.com/2015/09/29/constraints/

SCENE ASSIGNMENT:
THROW (max 120 frames)
Someone throwing something.
Think of a character and a context for your scene. Who is the character? Why he/she is throwing something? What is the situation and mood? Show complete planning (video ref + planning on paper) and BLOCKING

Week 8

New Topic: THROWS, HANDS
1. please read and study the section on ANTICIPATION in the Richard William Animator's Survival Kit Book (pages 273-284)

Assignments (due on week 9)
POSES
2 hands poses showing a closeup of the hands of the character only

SHOT PICK APART
Select a shot in which hands have an important role, or in which the hands are well animated. How the fingers move? Is there a finger that leads ahead of the others or all of them move at the same time? Do the palm bend?

QUICK STUDY
Hand poses. Close up animation of a hand grabing a rock. Make sure the fingers wrap nicely about the rock, and make sure you are not animating all fingers moving at the same time. Shoot reference and check how exactly we grab things, and how exactly our fingers and palms move.

SCENE ASSIGNMENT (due in week 9):
Address notes on blocking and start a nice polishing pass

Week 9

Review
Review Polishing pass for the Throw scene

TOPIC: EYE LINE
Assignments (due on week 10)

POSE:
Create a pose in which a character is carrying something very heavy. How the weight of the object affects the COG of the body? What can you do in the pose to show us how heavy the object is? Make sure the hands are well posed! Also, pay attention to the eye line.

SHOT PICK APART
Select a shot in which the eye line is interesting, in which the eye line helps the story or helps the viewer understand the character's emotions.

QUICK STUDY
Thoughts precede action. And where we look is important to show thought process... Also, the way we animate eyes is very different than the way we animate other body parts. We usually move our eyes really fast between one position and the next. In this quick study, animate a close up of the eyes moving towards 3 different directions. First it will look to point A, then will look at point B and then will look at point C. Each time the eyes look at something they have to hold still (we need that to focus). But the movement between each point should be really fast. How fast? Try different timings and see what works best. Also, to avoid repetition, use different timings for each hold, and vary slightly the timing of the eye line change.

SCENE ASSIGNMENT (due in week 9):
THROW: FINAL, please present it rendered with shadows

Week 10

Review:
Polishing of throwing shot
Reading:
1. page 233 of Richard William's book
2. Ik and FK definitions on the CLASS GUIDE

TOPIC: IK AND FK, WEIGHT
Assignments (due on week 11)

POSE:
none

SHOT PICK APART
Select a shot in which the character is carrying or dragging or pushing something really heavy! Analyse the poses and the timing. What are the elements (pose, timing, line of action, COG etc) that create the illusion of WEIGHT?

QUICK STUDY:

IK and FK. What is the difference? Animate two characters in the same scene, dropping their arm from a top position (arms straight up, then dropping down). An example of that action can be found on page 233 of Richard William's book: last example of the page. The first character has FK arms, and the second has IK arms.

SCENE ASSIGNMENT (due in week 9):
WEIGHT, Someone carrying, dragging or pushing a huge rock. Rocks are available in the library of Assets.
Please show a complete Planning. If you are planning to animate someone carrying a rock, please think about what is the constraint setup you will use it, and make it part of your planning. If you are animating a character pushing a rock, make sure to use IK hands. Dragging may work with IK or constraints, depending on your scene.. so make sure to think about your setup.
BLOCK YOUR SCENE.
A complete planning and blocking is due next week.

Week 11

Review
Blocking of weight scene

NO POSES, SHOT PICK APART OR QUICK STUDIES ARE DUE THIS WEEK!
Please focus on your weight shot.

SCENE ASSIGNMENT (due in week 9):
WEIGHT (Max 150 frames)
Address notes on Blocking if any, and start polishing

Week 12

Review
Review first pass polishing

SCENE ASSIGNMENT (due in week 9):
Dress up your scene! Add set elements or a backgroun image (painting preferable)

Make it look good!
WEIGHT
Continue polishing

Week 13

Work on your scene. Work on your class reel.
Both weight scene and class reel are due on 12/17.