INTRODUCTION

In the past two decades, the field of animation has undergone a renaissance on steroids. Animated media, from the mundane to the extraordinary, have infiltrated personal, social, economic and political spheres of human activity. Disregarding and displacing the real with simulacra, and employing strategies of seduction and escapism, animations are used by the advertising and entertainment industries to globally influence millions of uncritical viewers. Spectators, both passive and active, are drawn to, and in some cases addicted to, the illusion of power; synthetic realism and mindless humor that dominate mainstream animation practices, and for the most part, they have given little to no thought as to how animations potentially affect their beliefs and behaviors.

Taught as children to see animations as fun and funny, most adults fail to confront the social, historical, and ideological forces that are at work behind mainstream animation practices, and consequentially are easily manipulated by animated media. While animations can illuminate, enlighten and be thought-provoking — they can also be used to numb minds and hearts, spin the truth, fetishize commodities, objectify bodies, perpetuate stereotypes, glorify brutality and sell, sell, sell.

This course will emphasize the "Art" of animation, taking a creative and critical approach to working in the medium of 2D computer animation. New media animation will be considered in the context of (and potentially as placed against) entertainment and commercial animation. Elements from film production, popular and remix culture, experimental and traditional animation, the performing arts, the visual arts, creative writing, and storytelling may be combined to bring meaningful and unique perspectives to completed projects.

COURSE DESCRIPTION

The primary goal of this course is to provide an analytical, creative and instructional working environment that supports each student in learning and applying the art of 2D experimental animation. Students will be encouraged to follow their own interests and to critically examine their work within the broad context of commercial and experimental animation, contemporary art strategies and practices, and local and/or global communities.

Methods of instruction include software demonstrations, lectures, visual presentations, discussions, team work and critiques. Working on the Macintosh platform and using Adobe After Effects CC 2015 (along with Adobe Character Animator) for key framing, compositing and effects animation, students will learn how to create imaginative two-dimensional compositions and environments, and to animate their creative work. The end result will be a collection of short animations that demonstrate content development, contextual awareness, and the application of concepts learned, as well as the student’s creative approach to each project. Although students will learn how to create computer-generated animations, animation projects may also include video, found footage, live action, cut-outs, Xeroxed photographs, rotoscoping, draw and erase, paint and erase, stop-motion and/or hand drawn work and more...
This experience is designed to broaden the student's range of visually expressive new media. Emphasis will be placed on idea generation, concept development, visual aesthetics and technical abilities. In addition to weekly demonstrations and discussions students will be called upon to present their work in process. **Outside research and lab time are required** to support class participation and creative work.

**COURSE GOALS & LEARNING OUTCOMES**

Students who actively participate in this course will have a beginning understanding of how to conceptualize and create a thoughtful and thought-provoking, experimental 2D animated short by working their way through the following process:

**Concept development:**

Concept, context and structural development. Includes research, critical thinking and idea development. Students are encouraged to consider on how things might be ‘otherwise’ and to be aware of the social/political implications of the animations they make.

**Preparing source art:**

Creating layered vector or raster art files, drawings, sound files, movies, found and/or made images and objects; finding, making, modifying and remixing sound files.

**Building scenes:**

Using digital cinematography including camera choices and lighting; importing and positioning source art; and adding a soundscape to create scenes, sequences and climates that convey meaning.

**Animating objects and environments:**

Setting up animation controls, motion paths and keyframing events, sounds, and effects > this includes facial animation, animating cameras + lights, dynamics, and exquisite mixing + timing.

**Rendering images:**

Set up options and optimize your environment for the rendering of each frame for every scene.

**Compositing, post-processing and final output:**

Putting it all together (with sound) and getting it out to an audience

**REQUIREMENTS**

Each student is required to complete five projects (see percentage breakdown below), and to participate fully in classroom critiques, presentations and work sessions. Each student will draw on their experiences, research and imagination to create animated shorts that are meaningful, engaging, and that meet all of the criteria stated in each project description. All animations will be turned in as Quicktime, H264 or mp4 movies*. There will be ongoing reviews of work in progress. Students are expected to be prepared to work in and out of class and to participate in the discussions and critiques that take place during the semester.

Projects must reflect the student's best effort, show progress and be turned in on the specified due date. Late projects will receive a 5 point deduction. This class requires approximately 8+ hours per week spent on projects outside of class each and every week. Any student not working on a regular basis outside of class (either in the School of Art New Media Studios or at another computer) will fall behind and find it extremely difficult to keep up with the class.

* **Note:** See > [http://www.iorgsoft.com/compare/mov-vs-h.264-comparison.html](http://www.iorgsoft.com/compare/mov-vs-h.264-comparison.html) for a comparison of movie formats. Aim for the best quality you can achieve based on your computer and Operating System. Also take into consideration the overall file size & quality.
PARTICIPATION

All students are expected to attend all classes. Each studio class is 160 minutes of in-class demonstrations and studio workshop time. If you miss a class and then ask me what was covered in your absence, I might say that I showed students how to build a track matte hierarchy. This does not mean that I can then spend the next half hour covering this material with you. In other words, there are no make-up classes. Plan on attending if you plan on learning 2D animation and keeping up with your animation work. Plan on attending if your goal is to receive a good grade. Students are evaluated on in-class preparedness and participation. Therefore, more than two unexcused absences will result in a lowering of your grade by one increment (for example and A- would become a B+). Poor attendance usually results in poor quality work.

Please note that if absent, the student must find out from a classmate what he/she has missed and what to prepare for the following meeting. The professors cannot take time away from regular class instruction to repeat lectures and assignment requirements for each absent student.

Except for a serious medical or family emergency, no excuses for late work or class absences will be accepted. If you wish to be excused from class to observe a religious holiday, or for any other serious matter of a personal nature, you must bring it to the attention of the professor so that arrangements can be made for you to keep up with the progress of the class. Class starts and ends on its designated time. Habitual tardiness or leaving early on a habitual basis will affect your grade.

GRADING CRITERIA & POLICIES

Final grades will be assigned on the level of success in completing the above course requirements. Evidence of personal initiative, original creative work, thoughtful preparation and skillful execution, timeliness, attendance and participation will be measures of successful work; the greater the body of evidence, the higher the grade.

To be perfectly clear: your grade is based on in-class preparedness and participation, as well as consistent work throughout the term — to receive a good grade, it is NOT SUFFICIENT to crunch together an animation at the last minute. Letter grades will be assigned based on the George Mason University undergraduate grading system where a letter grade of “A” is equal to 4.00 grade points, “A-” equals 3.67 grade points, etc. See the Academic Policies section of the University Catalog (available online at www.gmu.edu) for more information.

Students will be evaluated on the following:

1. Timely completion of all 4 projects.
2. Full participation in weekly work sessions, discussions and critiques and in-class contributions to Student Choices: screenings and observations
3. Creative experimentation with media and ideas.
4. Developing individual interests including:
   • ability to express your own ideas about your work and the work of others
   • ability to apply critical visual analysis to work (form, content, context)
   • understanding and application of animation concepts
   • self-discipline and mature approach to work
Percentage Breakdown:

90%— Each of the following four projects will receive a letter grade. Together, these four projects will account for 90% of your final grade.

- **2/15 (Mon)** Project #1 DUE (15%)
  - **WHAT MATTERS NOW**
  - ≥15 second animation with sound

- **3/14 (Mon)** Project #2 DUE (25%)
  - **EXPERIMENTAL EXPLORATIONS**
  - ≥20-second animation with sound

- **3/28 (Mon.)** Project #3 DUE (10%)
  - **KID PAN ALLEY > CONCEPT**
  - Storyboards and strategies

- **4/18 (Mon.)** Project #4 DUE (10%)
  - **KID PAN ALLEY > BENCHMARK**
  - ≥45 seconds of KPA animation

- **5/1 (Mon.)** Project #5 DUE (30%)
  - **FINAL KID PAN ALLEY PROJECT**
  - 2-4 minute KPA animation with sound

10%— The remaining 10% of your final grade will be based on class participation and preparedness including outside research and studio work. All students will be required to bring in one “found” thought-provoking animation and present it to the class during weeks 5 – 6 (see Student Choices: screenings and observations in the class schedule).

Grading Standards: What makes a project or other assignment an “A”? (B, C, D, F)

**Score of A: Superior – Meets most or all of the following criteria:**
- Finds a visually and intellectually interesting approach to the assigned topic
- Animation shows serious thought and engagement in critical content production
- The work demonstrates an excellent understanding of formal and conceptual concerns
- Motion is layered, inventive, varied and shows understanding of the principles of animation
- The timing feels right (the work doesn’t drag or whip by unintentionally)
- Sound is well-considered, layered and adds significantly to the animation
- The work is well-crafted and has no distracting errors in mechanics (this doesn’t mean that the work can’t have a cut-out, grunge, scratchy, retro aesthetic, it just means that these choices are deliberate).

**Score of B: Strong – Meets most or all of the following criteria:**
- Clearly addresses the topic as assigned and explores it thoroughly
- Content is meaningful and motion is inventive
- Is well-developed, with strong artistic content and is thought-provoking
- The soundscape is layered, original, and not predictable
- Has no more than a few minor mechanical errors

**Score of C: Competent – Meets most or all of the following criteria:**
- Adequately addresses the topic and covers the major points required
- Motion is adequate, but not inventive
- Has artistic qualities but is not particularly creative or intellectually engaging
- Sound is competent but not particularly engaging
- Shows competent craftsmanship, but may have many small flaws and/or a few major flaws.
Score of D: Weak – Shows any of the following problems:
• Doesn’t cover all of the topic as assigned
• Doesn’t show an adequate understanding of what was covered in class
• Serious problems in artistic content, may be cliché, or unimaginative
• Motion is basic. Sound is predictable and flat
• Contains distracting technical flaws. Lacks serious effort

Score of F: Inadequate – Shows any of the following problems:
• Doesn’t address the topic as assigned
• Doesn’t show an understanding of what was covered in class
• Content is trite and unimaginative
• Very little (if any) thought behind the work, very little (if any) creative effort applied
• Is severely flawed mechanically

NOTE: Late projects will receive a 5-point deduction.

SCHEDULE

Week 1:  (W) 1/20 Introduce the ART of 2D Experimental Animation and discuss syllabus.
Discuss online resources, studio policies and desktop setup. Fill out student information forms and insert your photo. Use Photo Booth (or any app you’d like) to take your snapshot. Use Photoshop to add your name to your snapshot and then use the Local Area Network (LAN) to turn in your snapshot and your student information form.

Please name your files > LastName_FirstName_Snapshot_AVT382-002.jpg and LastName_FirstName_StudentInformation_AVT382-002.pdf

Introduce Project #1 – WHAT MATTERS NOW. Discuss the animation process. Discuss idea generation and concept development. Introduce working in Adobe Character Animator. Introduce making & importing a “puppet” that has “replacements” (for example, mouth expressions) and “handles,” which may be used to control a puppet.

Homework: Begin work on Project #1 – WHAT MATTERS NOW
Work on idea generation & concept development. Before next class, go to:
https://forums.adobe.com/docs/DOC-5992 and watch these 3 tutorials:
Turning Artwork into a Puppet, Creating Your First Cartoon and Top 10 Tips for Getting Started (in Character Animator). Build a puppet according to the AE Character Animator guidelines (see Project #1 handout). Be certain to name all of your layers as directed.

Create layered source materials for your puppet animation. Bring your draft spoken word text & your puppet-in-progress to class on Monday (1/27). Note: See Project #1 description for homework guidelines.

Week 2:  (M) 1/25 Special Guest: Paul Reisler from Kid Pan Alley www.kidpanalley.org
Discuss “the principles of animation.” Work in class on building and animating your puppet for Project #1. Learn to use a webcam, microphone and mouse to animate a puppet and learn to adjust puppet “behaviors” using their parameters. Practice recording a puppet performance, exporting the performance and then importing it into After Effects.
(T) 1/26  (Tuesday) Last day to ADD, Last day to DROP with no tuition penalty

(W) 1/27  More work in class on building and animating your puppet for Project #1. Introduce working in After Effects. Introduce making & importing assets, compositions, transformations, anchor points and parenting. Continue working in class with animating your puppet in Character Animator for Project #1.


Week 3:  (M) 2/1  After Effects demos on parenting, nested comps, pre-composing, split layer, time manipulation, keyframe velocity, auto orient. Also introduce keyframe assistants (the wiggler, the smoother and motion sketch). Work in class on your animation for Project #1.

(W) 2/3  Learn how to set up a 3D (aka 2.5D) scene in after Effects for your Character Animator puppet. Review exporting, importing, rendering, and adding sound. Work in class on animations.

Homework: Continue work on Project #1 – WHAT MATTERS NOW. Prepare source material for your 3D scene

Week 4:  (M) 2/8  Work in class on animations. Technical demos as needed. Be prepared to show your project #1 work-in-progress to the professor during class (this counts towards class participation and preparedness). Time for individual instruction.

(W) 2/10 Work in class on animations. Technical demos as needed. Be prepared to show your project #1 work-in-progress to the professor during class (this counts towards class participation and preparedness). Time for individual instruction.

Homework: Finish work on Project #1.

Week 5:  (M) 2/15  Project #1 DUE (15%)  WHAT MATTERS NOW ≥15 second animation with sound

Present and discuss animations in class.

(W) 2/17  Introduce Project #2 – EXPERIMENTAL EXPLORATIONS. Whiteboard animation, stop motion, draw and erase, rotoscoping. Also introduce time-based painting, erasing and cloning in After Effects.

(F) 2/19  Final Day to drop classes (Friday)

Homework: Start working on Project #2 – EXPERIMENTAL EXPLORATIONS. Begin developing your project ideas, storyboard and methods. Prepare for Student Choices > find a thoughtful and thought-provoking online animation and be prepared to present it to the class during Weeks 6 and 7. Storyboards are due in class on 2/22.
Week 6:  (M) 2/22  Student Choices: screenings and observations. In-class group critiques of student storyboards. group work. In-class demo on importing and sequencing frame stacks in After Effects. Work in class on animations. One-to-one instruction.

   (W) 2/24  Student Choices: screenings and observations. Work in class on animations. Time for individual instruction.

   **Homework:** Work on Project #2 – EXPERIMENTAL EXPLORATIONS Further develop your project ideas and choose the experimental method(s) that you want to work with. Complete at least 5 seconds of your animation and bring it with you to class on 2/29.

Week 7:  (M) 2/29  Student Choices: screenings and observations. Introduce and briefly discuss timeline for Project #3 – KID PAN ALLEY > CONCEPT. Work in class on animations. One-to-one instruction.

   (W) 3/2  Student Choices: screenings and observations. Studio work day for Project #2.

   **Homework:** Finishing working on Project #2 – EXPERIMENTAL EXPLORATIONS

Week 8:  **SPRING BREAK:** Monday, March 7 — Sunday March 13

Week 9:  (M) 3/14  **Project #2 DUE (25%)** EXPERIMENTAL EXPLORATIONS ≥20 -second animation with sound

   Present and discuss animations in class.

   (W) 3/16  **Introduce Project #3 – KID PAN ALLEY > CONCEPT**

   Review animation concept development strategies & processes, and storyboard format & content. Create interdisciplinary animation teams.

Week 10:  (M) 3/21  Studio Work Day. Time for teamwork. Start work on storyboards.

   (W) 3/23  Studio Work Day. Time for more teamwork. Add sound to storyboards and determine timings for each shot and scene.

   **Homework:** Continue working on Project #3 – KID PAN ALLEY > CONCEPT Refine storyboards and timing. Create animatic (storyboard with sound)

Week 11:  (M) 3/28  **Project #3 DUE (10%)** KID PAN ALLEY > CONCEPT storyboards and strategies

   Present and discuss animatics in class.

   (W) 3/30  **Review timeline & goals for Project #4 – KID PAN ALLEY > BENCHMARK**

   Technical demos as needed. Work in class on Project #4.

   Team and individual consultation.

   **Homework:** Refine animatic based on class critique. Work on Project #4 – KID PAN ALLEY > BENCHMARK

Week 12:  (M) 4/4  Work in class on Project #4. Team and individual consultation.

   Technical demos as needed.
(W) 4/6  Work in class on Project #4. Team and individual consultation. Technical demos as needed.

**Homework:** Continue work on Project #4 – KID PAN ALLEY > BENCHMARK

**Week 13: (M) 4/11**  Work in class on Project #4. Team and individual consultation. Technical demos as needed.

(W) 4/13  Work in class on Project #4. Team and individual consultation. Technical demos as needed.

**Homework:** Finish work on Project #4 – KID PAN ALLEY > BENCHMARK

**Week 14: (M) 4/18**  Project #4 DUE (10%)  KID PAN ALLEY > BENCHMARK  ≥45 seconds of KPA animation

(W) 4/20  Technical demos as needed. Work in class on Project #5. Team and individual consultation

**Homework:** Continue work on Project #5 – FINAL KPA PROJECT

**Week 15: (M) 4/25**  Work in class on animations. Time for individual instruction.

(W) 4/27  Studio work day for . Rendering and troubleshooting.

**Homework:** Continue work on Project #5 – FINAL KPA PROJECT

**Week 16: (M) 5/1**  Project #5 DUE (30%)  FINAL KID PAN ALLEY PROJECT  2-4 minute KPA animation with sound

**Monday, Last Day of Class from 1:30 – 4:10pm in room AB 1021.**
Present and critique KPA animations in class. Semester summary.

**Attendance is required for the entire final critique.**

**NOTE:** This schedule is subject to change. Schedule updates will be made in class should the need arise.

**MATERIALS**

**Required:** A portable USB flash drive or an external hard drive to transfer and back up your files.

Optional: White, unlined, 4” X 6” (or 6” X 9”) Index Cards for storyboards. Additional art materials > as needed depending on your animation project choices.

**BOOKS**

**NOTE:** All books used for this class are available (free of charge) to Mason students through Safari Tech Books Online. To access these books go to: [http://library.gmu.edu/](http://library.gmu.edu/) and the click on the tab “Articles and more” and then click on “S” under “databases.” Next click on “Safari Tech Books.” You will be asked to login using your Mason email username and password. This site can be accessed from on campus as well as from off campus. Search site by keywords.
Books about the Art of Animation:

*Animation*
By: Andrew Selby  
Publisher: Laurence King  
Pub. Date: May 6, 2013

*How to Make Animated Films*
By: Tony White; Kathryn Spencer  
Publisher: Focal Press  
Pub. Date: August 22, 2013

*Animation from Pencils to Pixels*  
AND  
*Tony White's Animator's Notebook*
By: Tony White  
Publisher: Focal Press  
Pub. Date: June 20, 2014  
Pub. Date: October 2, 2012

*Drawing in the Digital Age: An Observational Method for Artists and Animators*
By: Wei Xu, PhD  
Publisher: Sybex  
Pub. Date: March 6, 2012

*The Art of Stop-Motion Animation*
By: Ken A. Priebe  
Publisher: Course Technology PTR

*The Advanced Art of Stop-Motion Animation*
By: Kenneth A. Priebe  
Publisher: Course Technology PTR

Technical Videos and Books on How to Use After Effects:

**Note:** Instructional videos on how to use After Effects CC 2015 can be found by going to <http://lynda.gmu.edu/> and entering your Mason username and password. Enter “After Effects” into the search field. The tutorial called *After Effects CC Essential Training (2015)* is a good place to start.

*Creating Motion Graphics with After Effects, 5th Edition*
By: Chris Meyer; Trish Meyer  
Publisher: Focal Press > Pub. Date: February 11, 2013

*After Effects On the Spot*
Special technical tips on 3D, Audio, Paint Tools, Expressions, Rendering, etc.  
By: Richard Harrington  
Publisher: Focal Press > Pub. Date: October 2, 2012

Remember: All of the above books (plus many more books on software tools and animation practices) are available online to Mason students through Safari Tech Books Online. To access these books go to: <http://library.gmu.edu/> and the click on the tab “Articles and more” and then click on “S” under “databases.” Next click on “Safari Tech Books.” You will be asked to login using your Mason email username and password. This site can be accessed from on campus as well as from off campus. Search site by keywords such as: storyboard, script writing, timing, animation, After Effects, animation festivals, etc.
WEB SITES

Disclaimer of Endorsement:
References within any of the following sites to any specific commercial or non-commercial product, process, or service by trade name, trademark, manufacturer or otherwise does not constitute or imply an endorsement, recommendation, or favoring by the School of Art.

Disclaimer for Links to External Sites:
Links to external, or third party Web sites, are provided solely for student research. Links taken to other sites are done so at your own risk and the School of Art accepts no liability for any linked sites or their content. When you access an external Web site, keep in mind that the School of Art has no control over an external website's content.

Any link to an external Web site does not imply or mean that the School of Art endorses or accepts any responsibility for the content or the use of such Web site. The School of Art does not give any representation regarding the quality, safety, suitability, or reliability of external Web sites or any of the content contained in them. It is important for students to take necessary precautions, especially to ensure appropriate safety from viruses, worms, Trojan horses and other potentially destructive items.

When visiting external Web sites, students should review those Websites' privacy policies and other terms of use to learn more about, what, when and how they may or may not download and use any of the site's content.

Software tutorials from Lynda.gmu.edu:
Mason has partnered with lynda.com to provide free and online training resources to Mason students.

Use lynda.gmu.edu<http://lynda.gmu.edu/> to access Mason's university-wide subscription to a library of more than 2,000 videos on a broad range of subjects<http://www.lynda.com/subject/all>. Tutorials cover specific software, business skills, photography, music and video editing and production, animation, web design and development - and more. Available 24/7 from your computer, tablet or mobile device, go to lynda.gmu.edu<http://lynda.gmu.edu/> and enter your Mason username and password. Log in and learn!

Animation History, Background Information and examples:
https://vimeo.com/85427944
British animator Bob Godfrey (1921-2013) answers the question "What Is Animation?" This hand-drawn animation is based upon an interview recorded by Martin Pickles in 2006 at Bob's Acme Studio in South East London. You can read the rest of the interview here:


https://www.youtube.com/watch?v=x8exw6yKXw&feature=youtu.be
Sequential Animation: the first Palaeolithic animated pictures" - by Marc Azéma

http://www.precinemahistory.net/ (excellent, illustrated, chronological site on pre-cinema history)
http://animationhistory.blogspot.com/ (independent and experimental animations + links)
http://www.shortoftheweek.com/?s=animation (21st c. high-quality animations, searchable site)
https://www.nfb.ca/ National Film Board of Canada
(enter “animation” in the search box, also search “Norman McLaren”)
Eadweard Muybridge Motion Studies
http://video.mit.edu/watch/history-of-animation-3391/
http://video.mit.edu/search/?q=animation&x=-%C2%AD%E2%80%901242&y=-%C2%AD%E2%80%908
(short videos on hand-drawn animation) Watch: The History of Animation, Sound, & Stereotypes
http://www.annecy.org (English version, International Animation Festival: see about > archives)
http://www.awn.com/mag/issue3.2/3.2pages/3.2chimovitznyc.html (7 independent animators)
http://www.awn.com/mag/issue1.3/articles/moritz1.3.html (Lotte Reiniger, 1920s pioneer)
http://www.stopmotionanimation.com/ (stop motion handbook + an amazing number of links)
http://www.awn.com/mag/issue3.2/3.2pages/3.2student.html (under the camera techniques)
http://genedeitch.awn.com (an online book about his life as an animator)
http://asifa.net/ Association Internationale du Film d'Animation (ASIFA)
http://www.screenonline.org.uk/ British Film Institute (search under "animation")

Links to Adobe Character Animation Tutorials:
https://forums.adobe.com/docs/DOC-5992
Try these first > Online video tutorials for Adobe After Effects and Adobe Character Animator.

https://helpx.adobe.com/after-effects/how-to/create-puppet-animation.html
Using Adobe Character Animator

https://forums.adobe.com/docs/DOC-5976
Character Animator Help Document pdf

https://www.youtube.com/watch?v=JkBfEGPKN9s
Angie Taylor > Using Illustrator Artwork in Adobe After Effects 2015 Character Animator

https://helpx.adobe.com/after-effects/character-animator.html
Basic How-To steps (text) for Character Animator

https://forums.adobe.com/docs/DOC-5976
User manual for Character Animator (preview 3 is the latest manual)

Getting Started with Adobe Character Animator
Introducing Adobe Character Animator

Introducing Adobe Character Animator, a Revolutionary Way to Animate in Real Time

An In-Depth Look at Character Animator, Adobe's New Motion Capture & Animation Tool

Links to Character Animator Tutorials, Help Document, FAQs and free puppet templates

lots of Character Animator tutorials

Animation Principles:

http://www.animationmeat.com/notes/nineoldmen/nineoldmen.html
http://www.frankanollie.com/PhysicalAnimation.html

Cartoon Physics and Exaggeration:

http://remarque.org/~doug/cartoon-physics.html
https://www.youtube.com/watch?v=hz65A0jabtM
Wiley Coyote vs. Roadrunner (classic example of “cartoon Physics)

Conveying a Sense of Weight:

https://www.youtube.com/watch?v=bklPD7U9XIw Animation weight push/pull
https://www.youtube.com/watch?v=okes1DjLumo Weight Toss

Animated Walking:

https://www.youtube.com/watch?v=wx-ajEYzquk Learning to Walk
https://www.youtube.com/watch?v=ePhHDs53lfo Walk Cycle Animation : How to Breakdown an Animation Walk Cycle
https://www.youtube.com/watch?v=wlZ6Zjuka-Y Exaggerated walks based on Monty Python’s Ministry of Silly walks

Source Image and Textures Sites:

www.pngimg.com (website with free, high-quality images already on transparent backgrounds)
www.imageafter.com (copyright free, high quality images, searchable site)
NYC public library releases 180,000 images to public domain
www.mayang.com/textures
http://commons.wikimedia.org
http://svs.gsfc.nasa.gov/index.html
http://www.isourcetextures.com/catalogue/free-textures/free (free textures)
https://archive.org/ (online film archive)
http://www.loc.gov/index.html (Library of Congress)
http://americanart.si.edu/research/programs/archive/ (Smithsonian)
http://gimp-savvy.com/ (searchable, copyright free images from GIMP > free open source software)
http://wellcomeimages.org/ (creative commons license > free non-commercial use)
http://textures.forrest.cz/

Additional 2D Tutorials and sites for 2D animators:
https://helpx.adobe.com/after-effects/tutorials.html
https://helpx.adobe.com/support.html#top_products
(search this site by product and “tutorial”)
http://www.videocopilot.net/tutorials
http://library.creativecow.net/tutorials/adobeaftereffects
http://www.layersmagazine.com/category/aftereffects/
http://aftereffects.digitalmedianet.com/
http://www.cgarena.com/freestuff/tutorials/aetutorials.html
http://www.instructables.com/id/How-to-Make-a-Paper-Cutout-Puppet-for-Animation/#step1
Making a Cut Paper Jointed Puppet (Instructables)

Sound Sites (many of these sites have copyright free sounds at no charge):
http://library.gmu.edu/ and the click on the tab “Articles and more” and then click on “S” under “databases.” Scroll down and click on “Sonopedia” to access a professional library of copyright free sounds. If you access the library databases from off-campus, you will be asked to log in with your Mason account nameand password.
freemusicarchive.org (click on arrow to download sound)
The Free Music Archive is an interactive library of high-quality, legal audio downloads directed by WFMU, the most renowned freeform radio station in America.
www.freesound.org Login to download (register for a free account) and you will receive an activation code in your email - read it and click the link
Log in and find a sound and click the download button

http://www.audiomicro.com/ This site requires that you register to download sounds. They have “free” sounds, but please be careful since they also have sounds for sale.

http://www.partnersinrhyme.com
http://www.pacdv.com/sounds/
www.flashkit.com
http://www.tintagel.net/resources/Multimedia/Audio/
www.soundhunter.com/
www.videomaker.com/scripts/sfx_links.cfm (search = “sound”)
www.stonewashed.net/sfx.html
www.findsounds.com/
http://www.soundeffectsplus.com/
http://www.reelwaves.com/

Culture, Art and Theory Sites:

http://www.networkcultures.org
www.mnartists.org
www.rochesterartcenter.org
http://infosthetics.com/
http://www.medienkunstnetz.de/mediaartnet/
www.furtherfield.org
www.turbulence.org
www.rhizome.org
www.metamute.org
http://www.we-make-money-not-art.com/
http://www.selectparks.net/
http://www.kultureflash.net/
http://liftable.com/think/nova/ (pasta and vinegar)
http://www.isea-web.org/ (International Society for Electronic Arts)
http://www.bomsite.com/
http://www.aec.at/ (ARS Electronica)
www.ctheory.net
www.e-flux.com
http://www.todayandtomorrow.net/category/art/
http://www.leonardo.info/ (Leonardo Electronic Almanac)
http://www.ibiblio.org/nmediac/ (NMediac | The Journal of New Media and Culture)
http://www.idmaa.org/journal/ (The International Digital Media and Arts Journal)
http://www.culturemachine.net
http://www.lynndunham.blogspot.com/ (see LINKS to museums at bottom of page)
http://makezine.com/
http://www.hyperrhiz.net and more...

UNIVERSITY & SCHOOL OF ART POLICIES

In accordance with George Mason University policy, turn off all cellular telephones and other wireless communication devices at the start of class. The instructor of the class will keep his/her cell phone active to assure receipt of any Mason Alerts in a timely fashion; or in the event that the instructor does not have a cell phone, he/she will designate one student to keep a cell phone active to receive such alerts.

Commitment to Diversity
This class will be conducted as an intentionally inclusive community that celebrates diversity and welcomes the participation in the life of the university of faculty, staff and students who reflect the diversity of our plural society. All may feel free to speak and to be heard without fear that the content of the opinions they express will bias the evaluation of their academic performance or hinder their opportunities for participation in class activities. In turn, all are expected to be respectful of each other without regard to race, class, linguistic background, religion, political beliefs, gender identity, sex, sexual orientation, ethnicity, age, veteran’s status, or physical ability.

Statement on Ethics in Teaching and Practicing Art and Design
As professionals responsible for the education of undergraduate and graduate art and design students, the faculty of the School of Art adheres to the ethical standards and practices incorporated in the professional Code of Ethics of our national accreditation organization, The National Association of Schools of Art and Design (NASAD).

Open Studio Hours
SOA teaching studios are open to students for extended periods of time mornings, evenings and weekends whenever classes are not in progress. Policies, procedures and schedules for studio use are established by the SOA studio faculty and are posted outside the studios.

School of Art Print Studio
School of Art Print Studio (SOAP) is located in the School of Art Building on the Fairfax Campus. As a non-profit studio, SOAP offers a variety of services including printing and production services to students, faculty and staff. All jobs are processed with high quality materials on state-of-the-art equipment, specifically for graphic design portfolios, mixed-media paintings and reproductions, posters, handmade books, student assignments and proof sheets. More information can be found at soapprint.gmu.edu or 703-993-7203.

ArtsBus - Dates for Spring 2016
February 20
March 19
April 9

ArtsBus Credit
* Each student must have up to 5 AVT 300/Artsbus credits before graduation. For credit to appear on your transcript you must enroll in AVT 300. This also applies to anyone who intends to travel to New York independently, or do the DC Alternate Assignment.
* If you plan/need to go on multiple ArtsBus trips during a semester and need them towards your total requirement, you must enroll in multiple sections of AVT 300. Please go to the ArtsBus website: http://artsbus.gmu.edu "Student Information" for additional, very important information regarding ArtsBus policy.

* Non-AVT majors taking art classes do not need Artsbus credit BUT may need to go on the Artsbus for a class assignment. You can either sign up for AVT 300 or buy a ticket for the bus trip at the Center of the Arts. Alternate trips must be approved by the instructor of the course that is requiring an ArtsBus trip.

**Visual Voices Lecture Series Spring 2016**
Visual Voices is a year-long series of lectures by artists, art historians and others about contemporary art and art practice. Visual Voices lectures are held on Thursday evenings from 7:20-9:00 p.m. in Harris Theater: http://soa.gmu.edu/visualvoices/

**Important Deadlines:**

<table>
<thead>
<tr>
<th>January 1 Day of Week</th>
<th>Friday</th>
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<tbody>
<tr>
<td>Martin Luther King Day (no classes)</td>
<td>Mon Jan 18</td>
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<tr>
<td>First day of classes; last day to submit Domicile Reclassification Application; Payment Due Date; full semester waitlists removed</td>
<td>Tue Jan 19</td>
</tr>
<tr>
<td>Summer 2016 Graduation Intent Available via Patriot Web</td>
<td>Mon Jan 25</td>
</tr>
<tr>
<td>Last day to add classes—all individualized section forms due</td>
<td>Tues Jan 26</td>
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<td>Last day to drop with no tuition penalty</td>
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<tr>
<td>Final Drop Deadline (67% tuition penalty)</td>
<td>Fri Feb 2</td>
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<tr>
<td>Last day to file your Spring 2016 Graduation Intent</td>
<td>Fri Feb 19</td>
</tr>
<tr>
<td>Immunization Record Deadline</td>
<td>Tue Mar 1</td>
</tr>
<tr>
<td>Midterm progress reporting period (100-200 level classes)—grades available via Patriot Web</td>
<td>Mon Feb 15 – Fri Mar 18</td>
</tr>
<tr>
<td>Selective Withdrawal Period (undergraduate students only)</td>
<td>Mon Feb 22 – Fri Mar 25</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Mon Mar 7 – Sun Mar 13</td>
</tr>
<tr>
<td>Incomplete work from Fall 2015 due to Instructor</td>
<td>Fri Mar 25</td>
</tr>
<tr>
<td>Incomplete grade changes from Fall 2015 due to Registrar</td>
<td>Fri Apr 1</td>
</tr>
<tr>
<td>Dissertation/Thesis Deadline</td>
<td>Fri Apr 29</td>
</tr>
<tr>
<td>Last day of classes</td>
<td>Mon May 2</td>
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<tr>
<td>Reading Days</td>
<td>Tue May 3</td>
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<td>Reading days provide students with additional study time for final examinations. Faculty may schedule optional study sessions, but regular classes or exams may not be held.</td>
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<tr>
<td>Exam Period (beginning at 7:30 a.m.)</td>
<td>Wed May 4 – Wed May 11</td>
</tr>
<tr>
<td>Commencement and Degree Conferral Date</td>
<td>May 14</td>
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Once the add and drop deadlines have passed, instructors do not have the authority to approve requests from students to add or drop/withdraw late. Requests for *late adds* (up until the last day of classes) must be made by the student in the SOA office (or the office of the department offering the course), and generally are only approved in the case of a documented university error (such as a problem with financial aid being processed), LATE ADD fee will apply. Requests for non-selective *withdrawals* and *retroactive adds* (adds after the last day of classes) must be approved by the academic dean of the college in which the student’s major is located. For AVT majors, that is the CVPA Office of Academic Affairs, Performing Arts Building A407.
**Students with Disabilities and Learning Differences**

If you have a diagnosed disability or learning difference and you need academic accommodations, please inform me at the beginning of the semester and contact the Disabilities Resource Center (SUB I room 234, 703-993-2474). You must provide me with a faculty contact sheet from that office outlining the accommodations needed for your disability or learning difference. All academic accommodations must be arranged in advance through the DRC.

**Official Communications via GMU E-Mail**

Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account, and are required to activate that account and check it regularly.

**Attendance Policies**

Students are expected to attend the class periods of the courses for which they register. In-class participation is important not only to the individual student, but also to the class as a whole. Because class participation may be a factor in grading, instructors may use absence, tardiness, or early departure as de facto evidence of nonparticipation. Students who miss an exam with an acceptable excuse may be penalized according to the individual instructor's grading policy, as stated in the course syllabus.

**Honor Code**

Students in this class are bound by the Honor Code, as stated in the George Mason University Catalog. The honor code requires that the work you do as an individual be the product of your own individual synthesis or integration of ideas. (This does not prohibit collaborative work when it is approved by your instructor.) As a faculty member, I have an obligation to refer the names of students who may have violated the Honor Code to the Student Honor Council, which treats such cases very seriously. No grade is important enough to justify cheating, for which there are serious consequences that will follow you for the rest of your life. If you feel unusual pressure about your grade in this or any other course, please talk to me or to a member of the GMU Counseling Center staff.

Using someone else's words or ideas without giving them credit is plagiarism, a very serious Honor Code offense. It is very important to understand how to prevent committing plagiarism when using material from a source. If you wish to quote verbatim, you must use the exact words and punctuation just as the passage appears in the original and must use quotation marks and page numbers in your citation. If you want to paraphrase or summarize ideas from a source, you must put the ideas into your own words, and you must cite the source, using the APA or MLA format. (For assistance with documentation, I recommend Diana Hacker, A Writer's Reference.) The exception to this rule is information termed general knowledge—information that is widely known and stated in a number of sources. Determining what is general knowledge can be complicated, so the wise course is, “When in doubt, cite.”

Be especially careful when using the Internet for research. Not all Internet sources are equally reliable; some are just plain wrong. Also, since you can download text, it becomes very easy to inadvertently plagiarize. If you use an Internet source, you must cite the exact URL in your paper and include with it the last date that you successfully accessed the site.
Writing Center
Students who are in need of intensive help with grammar, structure or mechanics in their writing should make use of the services of Writing Center, located in Robinson A116 (703-993-1200). The services of the Writing Center are available by appointment, online and, occasionally, on a walk-in basis.

The Collaborative Learning Hub Located in Johnson Center 311 (703-993-3141), the lab offers in-person one-on-one support for the Adobe Creative Suite, Microsoft Office, Blackboard, and a variety of other software. Dual monitor PCs make the lab ideal for collaborating on group projects, Macs are also available; as well as a digital recording space, collaborative tables, and a SMART Board. Free workshops are also available (Adobe and Microsoft) through Training and Certification; visit ittraining.gmu.edu to see the schedule of workshops and to sign up.