

Ani452 MEL Scripting Grad section	Autumn 2017 Instructor: Joel D Benjamin Jbenjam@cdm.depaul.edu (or joeldbenjamin@gmail.com) Office (room CDM 702): Th 4:15 – 5:45
Course Description	<p>This is an introductory course in scripting for a 3D production environment. Students will learn and apply basic to intermediate programming concepts in order to improve the productivity of animators and modelers as well as efficiency of their own workflow for films and games and beyond.</p> <p>Using script, we will automate repetitive tasks, customize the interface, and create new tools.</p> <p>Students will gain a fundamental understanding of how a 3D animation package functions behind the interface as well as an introduction to how other professionals and independent artists create their own UI's and scripts.</p>
Course Objectives	<p>Students should have a solid knowledge of the following subjects by the end of this course:</p> <ul style="list-style-type: none"> ● How Maya functions Under the Hood ● Basic MEL commands – object creation and transformations, sub object manipulation, etc ● Introduction to coding fundamentals – variables and data types, if/then statements, loops, etc ● Basic uses of expressions in Maya ● Procedures and functions ● Introduction to UI creation in Maya ● Explore the online world of available scripts and codes and be able to deconstruct and reverse engineer for your own education and benefit. Not to copy, but to learn – the scripting world is extremely generous. ● Be able to break code down enough that you can talk about it to others – grad students in the class will be required to do a presentation towards the end of the quarter.
Things to Know	<p>Coding is time-consuming! However, most of that time will be spent trying to figure out what went wrong. Typos and misplaced or misused punctuation marks are the brunt of what you will be hunting for (<i>where is that missing ;? How do I add text to text? Is it a ' or a " here? Etc</i>)</p> <p>Maya crashes. Maya eats your files. Lots. <i>Expect to lose progress at some point!</i> When this happens, it does NOT excuse late or incomplete work!</p> <div> <p><u>How to reduce the likelihood of data loss:</u></p> <ul style="list-style-type: none"> ⤴ Save constantly. If you make a change, save your file! ⤴ Save incrementally. Meaning – save your files in versions, like BenjaminJoel_project1.mel, BenjaminJoel_project2.mel, </div>

	<p>BenjaminJoel_project3.mel, etc etc.</p> <ul style="list-style-type: none"> ⤴ Back up your files multiple places. Do NOT expect your work to be saved onto the school's computers – it's possible the files won't be there later. 4) Then when you're done, put the flash drive back in, copy the files back over to the flash drive. Just NEVER work directly off of those USB drives!
In the Classroom	<p>Students are expected to come prepared to every class. Coming prepared means:</p> <ul style="list-style-type: none"> ⤴ doing any assigned readings ⤴ having your hard drive or files ready on dropbox.com / Google Drive and ready to work in class ⤴ being well-rested and excited to go! <p>Each class, students should be prepared to work on their current project. There will be lecture and new techniques introduced each week, followed by at least <i>some</i> work time in-class. Always come prepared to work (we all have trains to catch at night, yes you must stay until the end of class).</p> <p>During lectures/screenings/critiques, students should not be using cell-phones, checking Facebook/YouTube/Twitter, etc. If the computer monitors can be turned off, they should be especially during screenings and critiques and class demos.</p> <p>If the instructor consistently has to ask students to be mentally (not just physically) present or stop distracting the class with cell phones or internets, they will forfeit receiving a grade for the current assignment, affecting their final grade.</p>
Attendance	<p>Excused absences: You are allotted 20% of the number of the classes scheduled for the quarter (for a night class, that's two classes. For a twice-a-week class, that's four). More than that and you will not pass the class. Note that <i>THESE are your excused absences</i> – if there is an emergency or you must miss class, this is what these excused absences are for. These excused absences are NOT for being lazy, so use them wisely as there will be NO exceptions.</p> <p>Tardiness is defined as not in the classroom when attendance is called or departing before the class has been formally dismissed by the instructor. Tardiness that exceeds thirty minutes will be counted as an absence. TWO late arrivals or early departures, or a combination of both, are counted as one absence. If you arrive late for class, it is your responsibility to make sure that you have been marked tardy rather than absent.</p> <p>No incompletes will be given without documented proof of circumstances beyond your control.</p> <p>The student is responsible for any lectures or assignments missed. If an assignment is due a week that you are absent, it is your responsibility to make sure it still arrives on time. This is for your benefit. A good portion of our class time will be spent doing hands on tutorials, screening films, and critiquing work. Lecture notes will not make up for these missed learning experiences.</p> <p>READ THIS: You may not miss the final class date (week 11 of class, same night, same time). Doing so will automatically forfeit a grade for your final project, which accounts</p>

	<p>for a significant part of your final grade. If for some reason you cannot make this day you must contact your instructor at the beginning of the quarter to work out the details. Excuses given after the fact will not be accepted. There will be a final written exam on this date. Check the school's calendar for final exam dates. (Night classes meet on the same day, same time, week 11)</p>
Class work	<p>This class is project-based and work-intensive. 90% of your grade will be based on weekly assignments and exercises. Do work, have fun. Work more. Get tired.</p> <p>All assignments and grades will be listed on D2L https://d2l.depaul.edu/</p> <p>NO LATE ASSIGNMENTS WILL BE ACCEPTED (emergencies and accidents happen, you get one freebie assignment that may be submitted late).</p> <p>However, any assignments turned in – assuming they receive at least a passing grade (basically you tried to do the work and got at least a C-) - may be resubmitted before the final class of the quarter with fixes and changes for a (potentially) better grade. Rarely in real life will you receive any credit for something not submitted when it was asked for, but you will often be asked to make changes. This will allow you to fix errors and make things work that weren't already working.</p>
Presentation	<p>Towards the end of the quarter, Grad students will do a 5-7 minute presentation in front of the class, breaking down and discussing a script of someone else's of their choosing (with approval from instructor). These presentations are low-key and pass/fail, but students must demonstrate a clear understanding of what the script is doing, why it's constructed the way it is, and at least a general understanding of the majority of the commands used (though sometimes you can find very tricky scripts!).</p>
Supplies	<p>This class will involve a large amount of sitting in front of a computer screen. Never trust that your work is safe on a lab computer! Also don't trust that a USB thumb drive will live forever! You need to develop safe work habits, so losing work will not be accepted as an excuse in this class.</p> <p>At minimum, you will need a USB thumb drive to save and back up your work this quarter. A larger hard drive is recommended. The capacity is up to your judgement.</p> <p>Dropbox.com or Google Drive are also excellent ways of storing and transporting files. Both of which have a fair amount of space available for free.</p>
Bibliography	<p>MEL Scripting for Maya Animators, Second Edition, by Mark R. Wilkins and Chris Kazmier. http://www.amazon.com/Scripting-Animators-Kaufmann-Computer-Graphics/dp/0120887932/ref=pd_bbs_sr_1?ie=UTF8&s=books&qid=1206641094&sr=8-1</p> <p>Publisher: Morgan Kaufmann; 2 edition (July 18, 2005) ISBN-10: 0120887932 ISBN-13: 978-0120887934</p>
Grading	<p>90% based on homework / projects</p> <p>5% midterm quiz (open book / open notes, closed computer)</p>

	<p>5% final exam (open book / open notes, closed computer)</p> <p>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.</p> <p>A indicates total excellence, B indicates good work, C indicates average, uninspired work, D work is unsatisfactory, F is really, really bad.</p>
Other Important Info	<p>Changes to Syllabus</p> <p>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.</p> <p>Online Course Evaluations</p> <p>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.</p> <p>Academic Integrity and Plagiarism</p> <p>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.</p> <p>Academic Policies</p> <p>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.</p> <p>Students with Disabilities</p> <p>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.</p> <p>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</p>