3D Graphics in Maya

Spring 2017
ITTC 134 (*StudioIT 1*)

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Office hours: 9am–11am MWF in 338A Wright Hall;   Office hours in WRT 338A
9am–1pm Tuesday WRT 338A   URL: **http://www.cs.uni.edu/~jacobson**
and by <u>appointment</u> almost anytime

VIP: Please <u>notify in advance</u> by email or after class <u>whenever possible</u>! Appointments are best and can also be arranged almost anytime outside of office hours and on weekends too. Note that I have two offices (ITTC 307 and WRT 338A).

Fall 2017 class schedule: 12:00 MWF and 2–3:15 TTh and 3:30–4:45 TTh

No Textbook: *We will use lynda.uni.edu, lots of handouts and web resources.*

Grading on exams, homework and quizzes.

1. **Six quizzes will count for 20 %.** There will be a 10 to 15 minute quiz every Wednesday, starting during week #4. On Wednesday September 17th we will have quiz one at the end of the 10th class. There will be no quiz during week #15, which is the last week of class. Most or all of these 10 Wednesday quizzes will be at the end of class. Some of the quizzes will be hands–on and let you use Maya and/or your web browser.

2. **The final exam period will occur on Wednesday, May 3rd.** A double quiz will constitute 10 % of your grade in the course. Your presentation or group presentation will constitute the other 10 percent. It will be from 1:00–2:50 p.m. on May 3rd

3. **The laboratory and lecture sessions and class participation/citizenship/attendance will count for 20 % of your grade.** Taking notes and having your notebook out is part of class participation. Being an active, helpful part of group exercises and a good model of a UNI Panther student citizen is part of class participation. Absolutely no cell phones or texting allowed during class.

4. **The homework assignments and projects will be worth 55 % of the total grade.** Some of the homework assignments will be completed and checked off in the lab classes.

Where to use Maya at UNI:

- Labs that will have MAYA on campus: The **Lang 213 lab** has it. All of the SCC (Student Computer Center) labs have Maya. Besides the well-known SCC labs like the Library and Maucker Union, check out Campbell 2033, Lang 113, Redeker Center, Roth 120, Schindler 123, Towers Center and the Wellness Center.   The Production House here in ITTC has it. The Wright Hall labs and most of the CHAS labs have it. Wright Hall currently has Maya 2013, so it is not the newest version.

- We will use Adobe After Effects so you can publish your Maya animation as Flash video.   You will learn enough After Effects and Flash so you can publish your Maya animation or Maya image to the web.

- Autodesk Maya is available for FREE to students for 36 months. It is available for FREE to anyone for a 30 day free trial. Go to http://students.autodesk.com to register as a student and get the free Autodesk Maya 2015 download to install on your computer.   Maya link: http://www.autodesk.com/education/free-software/maya   It does NOT matter whether you use Maya 2013 or Maya 2014 or Maya 2015 or Maya 2016.

- This class does NOT have any prerequisites.

Miscellaneous topics:

- Any student who requires some modification of seating, testing, or other class requirements should speak with the instructor at the beginning of the semester.
- When sending email, <u>sign with your first name</u> at the end of the note.
- Feel free to leave early for an appointment or whatever as that is never a problem but it is always nice to be told before class starts.
- The four classes **CS 1000, CS 1010, CS 1020** and **CS 1130** give you **microcomputer certification** from the computer science department. 12 hours of credits is required.

Reading assignment #1: Look at the following two web pages BEFORE Thursday's class and again AFTER Thursday's class:

www.cs.uni.edu/~jacobson/m/classDay1.html

www.cs.uni.edu/~jacobson/m/class2.html

1. What are the names of the 3 view tools? How do you use each tool (mouse buttons and key combination)?

2. What is the key used to switch from Wireframe view to Smooth Shading view? What key is used to switch back to wireframe view from shaded?

3. What are Transformations? What transformation does the W key prepare you to do? The E key? The R key?

4. What is APSDR an acronym for? What are the 5 menu sets in Maya? Note: This is for the Maya 2013 menus and older. Maya 2015 and 2016 have a different menu set than APSDR.

5. Where are the Quick Layout buttons located at? How is the spacebar used instead of using the top two Quick Layout buttons?

6. Where is the Channel Box? How can you show or hide the Channel Box by using the Status Bar?

7. What is a Pivot Point?

8. What axis is RED associated with?

9. What axis is GREEN associated with?

10. What axis is BLUE associatd with?

11. What does the Option Box look like and why do most commands have an Option Box that you can click instead of the command name?

12. What does it mean to SCRUB the time slider?

The Autodesk Maya software is FREE if you are a student. Go to http://students.autodesk.com/ to find out more information. You register to become part of the education community. You can use Maya for 36 months, as long as you are a student.

http://www.autodesk.com/education/free-software/maya

The first example that we will cover will be the Solar System. I will just use the Sun, the Earth and the Moon as a subset of a larger Solar System example.

http://lynda.uni.edu

https://www.lynda.com/Maya-tutorials/Maya-2016-Essential-Training/370380-2.html