New Media 3D (NMC 483) Fall 2016

Class meeting time & location: Thurs 10:00-11:50 Kidder 028. This is a hybrid class.

Instructor: Todd Kesterson

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Course Overview

This class is an introduction to the world of virtual space. We will use 3D modeling and animation software to create 3D environments, investigating light, color, texture, form, spatial design and composition. These skills and concepts can be applied to projects in many different fields, including advertising, entertainment, education and visualization. (There is obvious overlap among these divisions.)

Like many other art forms, the creation of 3D imagery requires tremendous focus and attention to detail. You will need practice patience and persistence throughout the term. You will be asked to conceptually embrace virtual space, along all of its limitations and frustrations. In other words, you must accept the nature of extremely complex (and often buggy) software, system shutdowns, and corrupted files. To avoid problems and panic you must start early, save frequently, backup regularly, and clear your head occasionally. Expect frustration, and accept that the artistic and visualization possibilities presented by these tools will likely make the struggle worthwhile.

Course Credits

This course combines approximately 120 hours of instruction, activities, project reviews, and outside of class project work for 4 credits. (Plan to spend at least 8 hours outside of class per week.) Half of the class is replaced with online activities.

Required Skills

You are expected to have intermediate level computer skills. It is recommended that you have familiarity with Adobe Photoshop and Final Cut Pro X. (We will have a basic overview of Final Cut Pro.) A background in design, sculpture, and lighting will be of great value to you.

Prerequisites

You should have taken NMC 101 (Intro) and NMC 351 (New Media Visualization) prior to this class.
Student Learning Outcomes
By the end of this course, students should be able to:

• Evaluate various approaches to solving conceptual and technical challenges using the tools, techniques, and concepts covered in class.
• Differentiate among the array of tools needed to achieve desired results in various design situations.
• Exhibit technical proficiency using the various tools introduced in class.
• Demonstrate an understanding of 3D spatial design.
• Apply 3D design principles, including fundamentals of modeling, lighting, and texturing.

Required Reading & Tutorials
• Lynda.com membership
• Articles to be assigned throughout term

Recommended Texts (Not ordered for this class at the OSU bookstore.)
• Demers, Owen. Digital Texturing and Painting. New Riders Publishing
• Birn, Jeremy. Digital Lighting and Rendering. New Riders Publishing

Software used in this class
In this class we will be using Maya 2016. A free student version of Maya 2015 is available at http://www.autodesk.com/education/free-software/maya  The student license is fully functional and lasts for 3 years (rather than the 30 day trial for non-students).

Teaching Philosophy
First and foremost we are communicators. Technical facility is important in achieving our goals, but should never be the driving force. Recognize that computer technology is rapidly progressing and will continue to replace a human work force in all repetitious tasks. The capacity to create and to innovate remains, thus far, the domain of the human mind. Learn to effectively communicate and express your creativity with these advanced tools and you will go far in differentiating yourself from the growing reach of the machine.
Evaluation of Student Performance

Grading will be based on your individual **effort** and **progress** throughout the term, your **application of the lecture and tutorial topics in your work**, as well as on **participation** in class discussions and activities. This means that you will be expected to **push yourself technically and artistically on all projects**.

Class projects will be reviewed, but point values will not be assigned to individual assignments. Your final grade will be based on my assessment of the sum of all of your assignments, progress throughout the term, and class attendance. This cannot be calculated by simply totaling points.

**Assignments**

Assigned work is due at the START of class on the designated date. **Your work must be in class even if you are not**. Late work will receive a **significantly reduced grade** (at least 1 letter for each day late) and will not be accepted more than **two week days beyond due date**. (E.g., assignments due on Thursday will only be accepted through 2 pm on Saturday for partial credit.)

**Attendance**

Attendance and in-class participation are required. **You MUST attend class every day to succeed**. You will **not** be able to complete the term project or pass the class without regular attendance. Your final grade will reflect your cumulative effort and work quality **throughout the entire term**.

You cannot make up for poor or missing work at the end of the term.

Attendance will be checked throughout the term along with the in-class activities and possible quizzes. **If you have 2 unexcused absences your term grade may drop one letter. 3 or more unexcused absences may result in an F for the term**. In other words, if you miss class, you will not only lose participation and pop-quiz points, but you may also drop a letter grade or fail.

Regular **punctual** attendance is expected at all class sessions and is particularly important on full class review days. I do not repeat lectures (though I will assist you in the case of documented absences). If you miss class for any reason (excused or not) it is YOUR responsibility to learn what was covered (by borrowing notes, visiting the blackboard site, and reading the on-line documentation in the case of software training). Do not ask for instructor help until you have done your homework and attempted to find the information on your own. **All absences must be discussed in person** rather than e-mail or phone calls. If you have another class or commitment at this time, you should drop this class.
**In-Class Exercises**
Throughout the term I may give in-class exercises designed to test your technical skills and conceptual understanding, and to push you to consider solutions to 3D communication challenges. The exercises allow me to gauge the technical skill level of the class as a whole, and to identify those who are excelling, those who need extra help, and those who should be investing more time in toward class.

**Computer and headphone use during class**
One temptation in a computer lab class is to ignore the material being presented and instead focus on your computer screen, whether for work in this class, another class, or personal play. Another tendency is to wear headphones to listen to music while you work. Neither of those practices will serve you well in this course. If you are listening to music or working on anything, including class projects, during instructor presentations you will miss key concepts and demonstrations. That almost always results in low or failing assignment grades. **IF YOU ARE SEEN WORKING ON ANY NON-CLASS RELATED MATERIAL OR WEARING HEADPHONES DURING CLASS * YOU WILL BE CONSIDERED ABSENT AND LOSE ALL ATTENDANCE POINTS FOR THAT DAY.**  
(*The exception to the no-headphones policy will be during specified audio work sessions.)

**Final Reviews**
Reviews of final class projects will take place on Thursday of week 10.

**Milne Computing Lab Hours**  http://oregonstate.edu/is/mediaservices/scf/main-computer-facility
*Academic Year:* Mon-Thurs: 7 AM - 2 AM, Fri: 7 AM - 9 PM, Sat: 10 AM - 9 PM, Sun: 10 AM - 2 AM
Schedules vary on holiday weekends. Check with the lab attendants for specifics.

**Contacting Instructor**
The best way to contact me is via e-mail. I will do my best to respond in a timely manner. However, **do not expect a response from me during evenings or weekends.** You won’t need to contact me during those times if you start early and don’t procrastinate on assignments. It should go without saying that I expect you to be respectful to me in your communications. You can expect the same from me. Remember to **include your name and “NMC 483” in the subject line and body of e-mails.**
Statement of Expectations for Student Conduct, i.e., cheating policies
http://oregonstate.edu/studentconduct/offenses-0

Students with Disabilities
Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 737-4098.

Assignment for Tuesday:
Lynda.com tutorials: Maya 2016 Essential Training (with George Maestri): Intro through Chap 3