

2016 Fall Semester
60 Carroll Hall
UNC School of Media & Journalism

Tuesdays & Thursdays
Section 001: 9am – 10:45pm

MEJO 585: **3-D Design Studio**

Maya for Visual Communication and Multimedia Design



Dr. Spencer Barnes

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51 Carroll Hall
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Office Hours

Tuesdays & Thursdays: 1pm – 2:30pm

Fridays: By appointment only (no later than 1:30pm)



Description and Policies

Course Description

The utilization of 3D software in visual communication is both an art and a science. In *MEJO 585: 3-D Design Studio* you will learn how to use a 3D software package called Autodesk Maya and to apply its capabilities to dynamic explanations of information and phenomena.

Building design skills comes with practice and this class is comprised of a series of exercises and projects. Design is also an intellectual exercise, so we will have discussions and reviews (i.e., critiques) of your work during the semester to help further your understanding of the design principles and processes involved. Because of the structure of this course, attendance is necessary for learning and is required (unexcused absences will affect your final grade).

Deadlines are fixed. If you need to miss a class, it is your responsibility to advise me in advance and make up the work. You are expected to conduct yourself within the guidelines of the UNC-CH Honor Code (see p. 9). All work must be completed with the high level of honesty and integrity that this university demands.

Goals of the Course

There are three primary goals for this class:

Software and Production Skills: You should finish the semester with a working knowledge of Autodesk Maya which will enable you to continue learning as you engage in a range of visual design projects.

Fundamentals: You should have a good understanding of how to apply 3D software for the depiction and dynamic explanation of information and phenomena.

Showreel: By the end of the course you will have completed three projects suitable for a showreel that can be included in your portfolio. As mentioned earlier, design is an intellectual endeavor, and an on-going process. This class will not turn you into an expert in visual effects, but we hope that you will finish the semester with a solid foundation in 3D modeling and animation, and a repertoire of useful skills.



Required Materials

You will be required to acquire and install the latest version of Autodesk Maya on your personal computer. The software is free from the Autodesk Education Community website located at the following url: <http://www.autodesk.com/education/home>.

You will be required to use Lynda.com for this course and video tutorials will be made available to you on this site: <http://software.sites.unc.edu/lynda/>. The tutorials will sometimes be assigned for required viewing.

Also, you will be required to use DigitalTutors for this course and video tutorials will be made available to you on this site: <http://www.digitaltutors.com>. The tutorials will sometimes be assigned for required viewing. You are only required to purchase the **\$29.99/month basic subscription**.

Additionally, I will assign videos for specific exercises and skills. I will also assign a variety of required reading materials and websites to be supplied during the semester.

Sakai, <https://sakai.unc.edu>, will house our course website.

Textbook

Motion Graphics: Principles and Practices from the Ground Up

Ian Crook and Peter Beare (2016) - Bloomsbury
ISBN: 9781472569004

Supplemental Readings & Resources

Mastering Autodesk Maya 2016

Todd Palamar (2015) - John Wiley & Sons
ISBN: 9781119059820

Textbook Companion Assets:

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1119059828,subjectCd-CSC0.html#instructor>

Items to purchase

Backup tools

DVDs, USB flash drive, portable hard drive or iPod. Remember that you are responsible for backing up your work. No deadline will be extended due to a loss of files.

Sketchbook

You will need to roughly sketch your ideas when exploring new concepts. Don't worry about your drawing skill level. Each project will include a rough storyboard that you produce prior to completing the project in Maya.



Assignments and Grading

Grading

This is a project-oriented course with grading based on four (4) main projects which you will work on during class and at home. There will also be several key exercises and homework assignments that will be graded. No final exam will be given.

Assignments

| | Value |
|------------------------------|-------------|
| Pop Quizzes | 5% |
| Homework and Key Exercises | 15% |
| Project 1: The Carolina Way | 10% |
| Project 2: Animal Behavior | 20% |
| Project 3: Natural Phenomena | 20% |
| Project 4: Showreel | 30% |
| | 100% |

Scale

| Percentage | Grade |
|-----------------|-------|
| 100-97.5% | A |
| 97.4-92.0% | A- |
| 91.9-89.0% | B+ |
| 88.9-84.0% | B |
| 83.9-80.0% | B- |
| 79.9-77.0% | C+ |
| 76.9-73.0% | C |
| 72.9-70.0% | C- |
| 69.9-68.0% | D+ |
| 67.9-63.0% | D |
| 62.9-60.0% | D- |
| 59.9% and below | F |

Attendance Policy

Each student will be allowed two (2) unexcused absences and beyond that amount of unexcused absences the student's final grade will be reduced by 10% for each additional unexcused absence. Excused absences (doctor's note or cleared with me in advance) do not affect your grade. **If no documentation is presented within one day of your return to class the absence will be considered unexcused.**

Notes

The work that you submit is what will be graded. No exceptions.

Late Work: The maximum grade that can be attained for a late assignment (e.g., exercise, project, etc.) will be reduced by 15% for every day that it is late. You have a maximum of one class period to submit late work, otherwise you will receive a zero for the assignment.

You are required to participate in critiques and reviews in class. Reviews are intended to stimulate thought and discussion between you and your colleagues. It is a forum for learning as well as a standard practice for developing ideas.

Please be aware that I reserve the right to reduce grades at the end of the semester in some cases based upon your class attendance, participation in critiques and reviews, and the overall quality of your work.



Assignments and Grading

Grading Criteria: Exercises and Projects

During this course you will be completing several lab exercises and homework assignments with Autodesk Maya. These exercises are intended to give you a better understanding of the software in preparation for the other projects. As mentioned earlier, some of these short exercises will be graded and commented upon, and you will be given credit for completing them on time.

This course requires effort and perserverance.

Due to production requirements you cannot wait until the last minute to complete assignments.

All grades are final, non-negotiable, and will not be approximated. No exceptions.

If your completed work is not submitted to the Dropbox you will receive a grade of zero for the assignment. No exceptions.

You are expected to remain in class until class is dismissed.

You are expected to complete all readings and to watch all tutorial videos that are assigned for homework.

All projects are to be completed as detailed in their respective project briefs and all project requirements must be followed.

Be prepared to work on projects outside of class. You will be able to work on some projects during class sessions but that will not be enough. It is your responsibility to organize your time in order to meet the deadlines. Consider your production speed and make plans accordingly. Always work in advance. Please note that the lab will sometimes be locked when you expect otherwise. If this is the case, please do not contact me as I have no control over lab access. Regardless of such circumstances you are still expected to complete your assignments on time.

A note about lab hours: the computer labs are in use all day from Monday through Thursday for classes but they should be open for general use on Fridays and on Sundays.

There are several expectations that you should meet in order to get a high grade. These are the general grading criteria I will be using for the projects:

1. Every project must be completed on time
2. Quality of the 3D models and their associated animations and renderings
3. Use of creativity and imagination
4. Attendance



| | | Topic/Theory* | Assignment |
|-------|----------|---|-------------------|
| 8-23 | Tuesday | Introduction to MEJO 585 and orientation to the lab/ Introduction to Autodesk Maya/ Introduction to Adobe After Effects | |
| 8-25 | Thursday | Matte Painting/ Inorganic Polygonal Modeling | |
| 8-30 | Tuesday | Matte Painting/ Inorganic Polygonal Modeling | |
| 9-1 | Thursday | Matte Painting/ Inorganic Polygonal Modeling | |
| 9-6 | Tuesday | Inorganic Polygonal Modeling/ UV Texturing | |
| 9-8 | Thursday | Inorganic Polygonal Modeling/ Rendering | |
| 9-13 | Tuesday | Inorganic Polygonal Modeling/ Rendering | Exercise 1 is due |
| 9-15 | Thursday | Inorganic Polygonal Modeling/ Rendering | |
| 9-20 | Tuesday | Critique | Project 1 is due |
| 9-22 | Thursday | Organic Polygonal Modeling | |
| 9-27 | Tuesday | Organic Polygonal Modeling | |
| 9-29 | Thursday | Organic Polygonal Modeling/ Rigging | |
| 10-4 | Tuesday | Organic Polygonal Modeling/ Rigging | |
| 10-6 | Thursday | Organic Polygonal Modeling/ Rigging | |
| 10-11 | Tuesday | UNIVERSITY DAY - NO CLASS | |
| 10-13 | Thursday | Organic Polygonal Modeling/ Rigging | Exercise 2 is due |

*This is meant to be a guide for topics discussed in the course this semester. Some dates for topics may fluctuate depending upon the class' progress.



| | | Topic/Theory* | Assignment |
|-----------------------|----------|--|-------------------|
| 10-18 | Tuesday | Organic Polygonal Modeling/ Animation | |
| 10-20 | Thursday | HOLIDAY | |
| 10-25 | Tuesday | Critique | Project 2 is due |
| 10-27 | Thursday | Dynamic Phenomena | |
| 11-1 | Tuesday | Dynamic Phenomena | |
| 11-3 | Thursday | Dynamic Phenomena | |
| 11-8 | Tuesday | Dynamic Phenomena/ Paint Effects | |
| 11-10 | Thursday | Dynamic Phenomena/ Paint Effects | |
| 11-15 | Tuesday | Dynamic Phenomena/ Paint Effects | |
| 11-17 | Thursday | Dynamic Phenomena/ Paint Effects | |
| 11-22 | Tuesday | Critique | Project 3 is due |
| 11-24 | Thursday | HOLIDAY | |
| 11-29 | Tuesday | Advanced Topics in Maya/ Compositing | |
| 12-1 | Thursday | Advanced Topics in Maya/ Compositing | |
| 12-6 | Tuesday | Advanced Topics in Maya/ Compositing | Exercise 3 is due |
| FINAL CRITIQUE | | | |
| 12-15 | Thursday | Final Critique @ 9:30am | Project 4 is due |

*This is meant to be a guide for topics discussed in the course this semester. Some dates for topics may fluctuate depending upon the class' progress.



Working practices

Working over a network

You will turn in your assignments by uploading them to the Carroll server. A server is simply another computer with lots of hard drive space that is connected to the lab computers. This provides a central location from which you can access project files, post your assignments, and temporarily store your work. There will be four folders on the server in a master folder for MEJO 585: 1) Class Materials, 2) Drop Box, 3) Instructor, and 4) Students. All materials needed for class such as lectures, lecture notes, and demonstration files will be located in *Class Materials*. You will turn in or post your homework assignments, final exercises, and projects into the *Drop Box*. The *Students* folder is for your use. You may store copies of your work or any other class related files in this folder. Please create a folder within *Students* with your name (e.g., John Doe) on it for storing your files.

The network that your lab computer uses to talk to the server is shared by the entire school and it can slow down or “freeze” if too many people try to use it simultaneously. If you open a file directly from the server it may “hang” when you are trying to save it and your work will be lost. There will be nothing that we can do to retrieve the file if this happens. BEFORE WORKING ON A FILE COPY IT TO THE DATA DRIVE ON YOUR COMPUTER AND THEN OPEN IT FROM THE DATA DRIVE TO WORK WITH IT. PLEASE NOTE: IF YOU COPY A FILE TO YOUR DESKTOP INSTEAD OF TO THE DATA DRIVE, IT WILL BE ERASED AT THE END OF THE DAY. THE DATA DRIVE IS NOT ERASED UNTIL THE END OF THE SEMESTER.

While you may store copies of your work on the server during the semester other students will have access to that common folder which increases the chance of a file being accidentally damaged or lost. Also, I will maintain and organize our files on the server on a regular basis. If you do not have a backup you will lose your work. ALWAYS make a separate copy of your current work on a flash drive or other portable storage device before the end of class.

+++++++ ALWAYS BACKUP YOUR FILES! +++++++

LOST FILES AT A DEADLINE ARE NOT EXCUSABLE AND WILL ADVERSELY AFFECT YOUR FINAL GRADE.



UNC Honor Code

I expect that each student will conduct himself or herself within the guidelines of the University honor system (<http://honor.unc.edu>). All academic work should be done with the high levels of honesty and integrity that this University demands. You are expected to produce your own work in this class. If you have any questions about your responsibility or your instructor's responsibility as a faculty member under the Honor Code, please see the course instructor or Senior Associate Dean Charlie Tuggle, or you may speak with a representative of the Student Attorney Office or the Office of the Dean of Students.

Seeking Help

If you need individual assistance, it's your responsibility to meet with the instructor. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem – whether the problem is difficulty with course material, a disability, or an illness.

Diversity

The University's policy on Prohibiting Harassment and Discrimination is outlined in the Undergraduate Bulletin: <http://www.unc.edu/ugradbulletin/>. UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

Special Accommodations

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Services website at <https://accessibility.unc.edu/>.



ACEJMC Core Values and Competencies

The School of Media & Journalism's accrediting body outlines a number of values you should be aware of and competencies you should be able to demonstrate by the time you graduate from our program. Learn more about them here:

<http://www2.ku.edu/~acejmc/PROGRAM/PRINCIPLES.SHTML#vals&comps>

No single course could possibly give you all of these values and competencies; but collectively, our classes are designed to build your abilities in each of these areas. In this class, we will address several of the values and competencies listed under "Professional values and competencies" in the link above. The specific ACEJMC core values and competencies addressed in this course are listed below:

- **Understand concepts and apply theories in the use and presentation of images and information;**
- **Think critically, creatively and independently;**
- **Conduct research and evaluate information by methods appropriate to the communications professions in which they work;**
- **Critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;**
- **Apply basic numerical and statistical concepts;**
- **Apply tools and technologies appropriate for the communications professions in which they work.**