

# ADV Digital 3D Projects

ARTS 4020-01

Tuesday, Friday 2:00pm- 3:50pm

Sage Lab, VAST Studio 2411

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*Computer Science is no more about computers than astronomy is about telescopes.*

- E. W. Dijkstra

## **Abstract:**

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This course will explore conceptual ideas with a developed toolkit of skills. Skills possibly covered will be Processing, MEL, advanced rendering and lighting, motion capture, and unlimited features. Using these techniques, ideas about system, process, fragmentation, space, topology, time, and more will be researched. Emphasis will be placed on conceptual, finished, high quality artwork.

## **Supplies:**

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Required:

- Notebook
- Data storage – And lots of it. Whichever means of saving your files is most trustworthy and effective for you.

Suggested:

- Learning Maya 2008 : The Special Effects Handbook. – While this book is not required, it contains great examples of advanced texturing, lighting, and rendering techniques.

## **Important Points:**

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Be on time:

Attendance will be taken every class. Excused absences must be cleared and accepted on instructor's conditions before the start of class by phone, email, or in person. See Grading and Excuses for further explanation.

Excuses:

Excuses are only acceptable in the following four scenarios: death of family member, a note from doctor or documentation of hospitalization, viable religious observance, and presentation or exhibition of academic work or research at a conference, symposium, gallery, museum, etc. Singular sick days are excusable without documentation within a reasonable limit – for example: two. Illness spanning two or

more consecutive class days is not excusable without documentation. Excuses must be declared before class time.

**Responsibility:**

It will be the student's responsibility to keep track of their performance and all aspects pertaining to it, this includes accepting responsibility for previous actions, attendance, and performance.

**Procrastination:**

Waiting until the last minute is not advisable in this course. Animation does not have a "quick solution," and you will have several difficulties when rushing through it.

**Studio Format/ Work Load:**

This course does not require everyday attention, although it is a studio course and will require six to ten hours of work outside of class each week on average.

**E-mail:**

E-mail is the most effective communication with me outside of class. I will use your RPI account to communicate with you.

**Cell Phone:**

No audible cell phones; if you decide to take the call, you will exit the classroom to talk.

**Distractive Computing:**

No computing, exceptions are: following in class demos and work in class. Refusal to turn off monitors, close laptops, etc will result in receiving an absence for that day.

**Participation:**

- You will be required to speak and present your work.
- Part of each assignment grade will be based on your participation during critique.
- You will also be required to speak about your colleagues' work.
- A simple like, dislike, or opinion must be followed with substantiating reasons.
- Please give positive feedback. Our class has a mix of disciplines, and not everyone is accustomed or prepared for a full critique forum.
- Allow everyone a chance to speak.
- Use common sense and play nice: don't interrupt; do wait for your turn, etc.

**Ideas:**

- Ideas that cause any physical or emotional harm to the student or anyone else will not be accepted.
- All other ideas will be accepted for conversation.
- A student may excuse themselves for a short duration if there is a conflict of religious beliefs with the content presented.

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**Studio Critique:**

**Monitors/ Laptops/ etc:**

- All audio/visual devices other than the equipment being used to present work will be turned off.
- Refusal to turn off monitors, close laptops, etc will result in receiving an absence for that day.

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- You will be required to speak and present your work.

- Part of each assignment grade will be based on your participation during critique.
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Ideas:

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## **Grading:**

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Assignments:

- Assignments are due at the beginning of class.
- Twenty-five percent of an assignment's total points will be deducted per day late. Days are calculated by the time an assignment is due. After four days, an assignment will be graded with a zero.
- Voluntary extra assignments for an increase in a final grade will not be accepted.
- Redoing an assignment for a potentially higher score is acceptable only if the assignment was originally turned in on time and if the re-completed assignment is submitted within four days of the assignment's original deadline. The final assignment of the semester will not be available for redoing.

Attendance:

- Attendance is mandatory and taken at the beginning of class.
- Disputes brought to the instructor's attention within one week of the infraction will be considered and discussed. All other disputes will not be considered.
- Attendance final grade modifications as follows:  
Each three absences equal reduction of total points by one letter grade.  
Work in Class days are not "free" days.
- Attendance to Final Critique during exam week is mandatory. Failure to appear will result in the reduction of total points by one letter grade.

Overall:

- Grades will be based on an appropriate level for continuation into an industry related profession.
- Any appeal for grades must be brought to the instructor during office hours or at a scheduled time convenient to both parties. Keep in mind that an appeal has the potential to raise or lower your grade.
- Incompletes will only be granted for the death of family member during the semester, note from doctor or documentation of hospitalization representing a significant period of time.
- Only if given the final grade of "I", will additional work after the conclusion of a semester will be accepted for a change of grade.
- There is no rounding of the thousands place.

- Points are based on the RPI +/- system as follows:

Grade	Expectations	Assigned Value	Range
A	Excellent: consistent effort, timely	4.00	- 3.68
A -		3.67	- 3.34
B +		3.33	- 3.01
B	Good: effort, timely	3.00	- 2.68
B -		2.67	- 2.34
C +		2.33	- 2.01
C	Satisfactory: some effort, timely	2.00	- 1.68
C -		1.67	- 1.34
D +		1.33	- 1.01
D	Passable: little effort	1.00	- .68
F	Failure	0.67	- 0

### **Academic Integrity**

#### Trust:

Student-Teacher relationships are built on trust. Students must trust that teachers have made appropriate decisions about the structure and content of the courses they teach. And, teachers must trust that the assignments which students turn in are theirs. Acts which violate this trust undermine the educational process.

#### Plagiarism:

All work produced in this course must be original and created by the student. First infraction will result in a failure for the course and a report to the Office of the Dean.

#### Collaboration:

Collaborative work and discussion is encouraged. Instructor must be notified of students' intention to collaborate on assignments well ahead of that assignment's deadline. Instructor will determine whether or not collaboration will be allowed. Upon assignment completion, there must be documentation of each member's contribution to the finished assignment. The instructor reserves the right to award members of the collaboration different grades.

### **Note for fourth year EMAC students**

This course is eligible to serve as part of your EMAC thesis.

The thesis experience consists of eight 4000-level credits within the concentration, culminating in a public presentation and documentation of the work produced. The eight credits may be selected from a list of eligible courses and internships within each concentration. Students may select two courses **or** one course and an internship.

In the event that you have chosen to take this course for thesis credit, you must inform the instructor of the course of your intentions and complete paperwork declaring your thesis plans and rationale.

If this is your first thesis course, you must complete Part One of the EMAC Thesis Requirement Form stating your intentions regarding the second course when you register for that course. Submit Part One of the form to Erin Glasheen.

If this is your second thesis course, you must complete Part Two of the EMAC Thesis Requirement Form describing the public presentation of your thesis. Submit Part Two of the form to Erin Glasheen and the instructor for the second thesis course or internship by the date specified on the form. Upon completion of the presentation, you must submit documentation of the presentation and a copy of this form to the instructor for his/her signature.

**If you do not complete the presentation and documentation, the instructor will give you an “Incomplete” in the thesis course or internship.**

## Project Assignment Schedule:

Projects are due on the date that matches the end of their time block. For example, the first assignment "Project 1" is due Mar 3rd not Mar 6th. Readings are supplied for students' use in relation to project assignments. Discussion about readings will not occur unless otherwise notified during the class time in which they are assigned.

Day	in Class	assignments	
13-Jan	NURBS	Project 1 50%	EMPAC Brent Green
16-Jan	NURBS		
20-Jan	Advanced Shader Networks		
23-Jan	Advanced Shader Networks		
27-Jan	Advanced Lighting, Rendering		
30-Jan	Advanced Lighting, Rendering		
3-Feb	work in class		
6-Feb	work in class		
10-Feb	project 1 mid-crit		
13-Feb	project 1 mid-crit		
17-Feb	No Class - Mon Sched	50% of project 1	Blue Sky Studios
20-Feb	render layers?		
24-Feb	work in class		
27-Feb	work in class		
3-Mar	project 1 final crit		
6-Mar	project 1 final crit		
10-Mar	No Class - Spring Break	50% of project 1	Deadline for EMPAC
13-Mar	No Class - Spring Break		
17-Mar	Python & MEL		
20-Mar	Particles		
24-Mar	Particles		
27-Mar	work in class		
31-Mar	time & space crit		
3-Apr	time & space crit		
7-Apr	Fluids?		
10-Apr	Fur?		
14-Apr	Hair?	Time & Space 25%	EMPAC onedotzero
17-Apr	work in class		
21-Apr	work in class		
24-Apr	crit		
28-Apr	crit		
		Systems & Process 25%	Deadline for CE part 2

Changes to syllabus may be made at instructor's best discretion with notification to the student