

Flipping an introductory architecture course

ARC 141 – Introduction to Arts and Architecture
3 ECTS; 2 h / w

Architectural education is open to Flipping by its very nature.

Design studios are at the core of architectural education.

Design studios are active learning environments where students learn
by doing.

Such an approach immediately creates a learning culture which is based on active learning where students are challenged to take responsibility, to solve complex problems and develop their individual character as designers while being able to work in group environments.

A design studio is not a course where information is given and the students are expected to learn and use that information.

It is a collaborative learning environment. Students and instructors share this environment as designers with different levels of experience.

It is thus interactive and a learning process for all parties involved.

Thus, following the lead of design studios, flipping theoretical courses within the architectural curriculum and making them active learning environments should be almost natural.

However, this is not necessarily the case.

There is a wide gap in pedagogical approaches used between design studios and theory courses within architectural education

(Allen, 1997; Chiurini, 2006; Smith, 2004; Oakley, B, Felder, R M, Brent, R; Elhadj, I, 2004).

non-studio courses are mostly conventional lecture courses

Within this context, it is an important challenge to find ways to develop non-studio courses as active learning environments.

Architecture Program

course no	course name	ects
1st Semester		
ARC 101	Architectural Design I	12
ARC 111	Visual Communication I	4
ARC 121	Environmental Ethics	3
ARC 141	Introduction to Art and Architecture	3
ENG 101	English for Academic Purposes I	4
TURK 101	Turkish Language and Literature I	2
GE 100	Introduction to University Life	2
		30
3rd Semester		
ARC 201	Architectural Design III	12
ARC 221	Architectural History & Theory II	5
ARC 231	Architectural Technology II	5
ARC 211	Digital Communication I	6
HISTR 101	Princ of Ataturk Hist of Turkish Rep I	2
		30
5th Semester		
ARC 301	Architectural Design V	10
ARC 331	Architectural Technology IV	5
ARC 321	Architectural History & Theory IV	5
	Elective (from history / theory group)	5
	Elective (from technology group)	5
		30
7th Semester		
ARC 401	Architectural Design VII	10
	Elective (from history / theory group)	5
	Elective (from technology group)	5
	Elective (free)	5
	Elective (free)	5
		30
		240

course no	course name	ects
2nd Semester		
ARC 102	Architectural Design II	12
ARC 112	Visual Communication II	4
ARC 132	Architectural Technology I	4
ARC 122	Architectural History & Theory I	3
ENG 102	English for Academic Purposes II	4
TURK 102	Turkish Language and Literature II	2
ARC 100	In School Internship	1
		30
4th Semester		
ARC 202	Architectural Design IV	12
ARC 222	Architectural History & Theory III	5
ARC 232	Architectural Technology III	5
ARC 212	Digital Communication II	6
HISTR 102	Princ of Ataturk Hist of Turkish Rep II	2
		30
6th Semester		
ARC 302	Architectural Design VI	10
ARC 352	Architectural Speaking / Writing	3
ARC 342	City Design	5
	Elective (from history / theory group)	5
	Elective (from technology group)	5
ARC 300	Summer Internship	2
		30
8th Semester		
ARC 402	Architectural Design VIII	10
ARC 490	Professional Practice	3
	Elective (free)	5
	Elective (free)	5
	Elective (free)	5
ARC 400	Summer Internship	2
		30

This is an introductory course into the understanding and appreciation of arts and architecture.

The main purpose of the course is to familiarize the students with the universe of arts and architecture through the discussion of major works and concepts, critical ideas and influential creators both as individuals and groups.

At the end of the course, students will understand that all artistic creation can only be understood and evaluated within their social, political, cultural and economic contexts of their societies.

Learning objectives of Introduction to Arts and Architecture

- Familiarize the students with major works; artists and architects as well as and concepts and ideas
- Develop critical thinking skills
- Develop students' terminology of art and architecture
- Develop a contextual understanding of works of art and architecture

ARC 141 has been conducted four times

Fall 2014 (6)

Spring 2015 (16)

revisions



Fall 2015 (40 + 35)

Spring 2016 (12)

intended structure of the course

<i>Fall 2014</i> <i>Spring 2015</i>	<i>Before class</i>	<i>In-class</i>
Activity	Watch video	Discussion of concepts and works from the video Introduction of new examples and ideas followed by discussion Group work, presentation and further discussion

actual structure of the course

<i>Fall 2014</i> <i>Spring 2015</i>	<i>Before class</i>	<i>In-class</i>
Activity	Partially watch video	Presenting of the main ideas again Discussion of concepts and works from the video Introduction of new examples and ideas followed by discussion Some group work

revised structure of the course

<i>Fall 2015</i>	<i>Before class</i>	<i>In-class</i>
Activity	Watch video Answer questions presented in the video, upload into system After receiving the feedback from the instructor, resubmit with revision	Discussion of students' answers Presentation of new material and discussion Group work, presentation and discussion

original Assessment:

Presentations in class:	25 points
Mid-term paper:	25 points
Final exam:	50 points

Revised Assessment:

- Questions on Blackboard: 20 points
- Presentations in class: 20 points
- Mid-term paper: 20 points
- Final paper: 40 points

Semester	Watch rate of videos	Before class assignment completion rate
Fall 2014	30%	-
Spring 2015		
Fall 2015	80%	65%

Example flow

theme: process (time)

1: before class – introduction of the concept, a short video

Process

Most of the time we are only exposed to the end result of a creative process.
A building, a work of art.

Normally we do not know how the idea was conceived, developed and built.
Once it is complete we also assume that this work will remain in that state 'forever'.



ARC 141 – Introduction to Art and Architecture 1

Week 7

2

MEF ARCHITECTURE



ARC 141 – Introduction to Art and Architecture 1 Week 7 5 MEF ARCHITECTURE



ARC 141 – Introduction to Art and Architecture 1 Week 7 6 MEF ARCHITECTURE



ARC 141 – Introduction to Art and Architecture 1 Week 7 7 MEF ARCHITECTURE



Finnish Embassy, DC
Heikkinen – Komonen
2000



Mobile, National Gallery
Alexander Calder, 1972



2: before class – questions:

can we use TIME as a material in architecture?

3: before class – answers and feedback:

- ARC 141.02 Introduction to Art and Architecture
 - Instructor information
 - syllabus
 - Week 01
 - Week 02
 - Week 03
 - Week 04
 - Week 05
 - Week 6
 - Week 07
 - mid-term assignment
 - Week 08
 - Week 09
 - Week 10
 - Week 11
 - Week 12
 - Week 13
 - Week 14
 - Course Content
 - Additional Resources

Grade Assignment: week 12

Assign a grade and feedback for the current assignment attempt. Override the overall grade for the assignment by typing a grade in the grade field. If multiple attempts for a test have been allowed, a Student's grade is not released until all of the attempts have been graded. Click **Hide User Names** to grade attempts with user names hidden. Click **Show User Names** to display user information. [More Help](#)

Jump to... Hide User Names Refresh

Viewing 1 of 18 gradable items

Rumeysa Aksoy (Attempt 1 of 1)

Exit

Assignment Instructions

Assignment Details

GRADE
LAST GRADED ATTEMPT **8/10**

ATTEMPT (LATE)
12/11/15 9:55 AM **8/10**

COMMENTS

Rumeysa Aksoy
12/11/15 9:55 AM

The material that we have used in our building can change by the time. For example if we use steel, it can rust. And it will change its appearance. But is it a good thing or bad thing? I think it depends. For example The Statue of Liberty's material was copper. But it change into green. Because time hes passed and it rusted.

Safari File Edit View History Bookmarks Window Help

mef.blackboard.com

Web of Science [v.5.21] - All Databases Results

Grade Assignment: week 12 – ARC 141.02 Introduction to ...

syllabus

Week 01

Week 02

Week 03

Week 04

Week 05

Week 6

Week 07

mid-term assignment

Week 08

Week 09

Week 10

Week 11

Week 12

Week 13

Week 14

Course Content

Additional Resources

how to give a quote

COURSE MANAGEMENT

Control Panel

Content Collection →

Jump to... Hide User Names Refresh

Viewing 1 of 18 gradable items

Rumeysa Aksoy (Attempt 1 of 1)

Exit

Assignment Instructions ▾

Assignment Details ▾

GRADE

LAST GRADED ATTEMPT **8/10**

ATTEMPT (LATE)

12/11/15 9:55 AM

FEEDBACK TO LEARNER

Very good example.

Can we use that process deliberately in our designs?

A

Add Notes

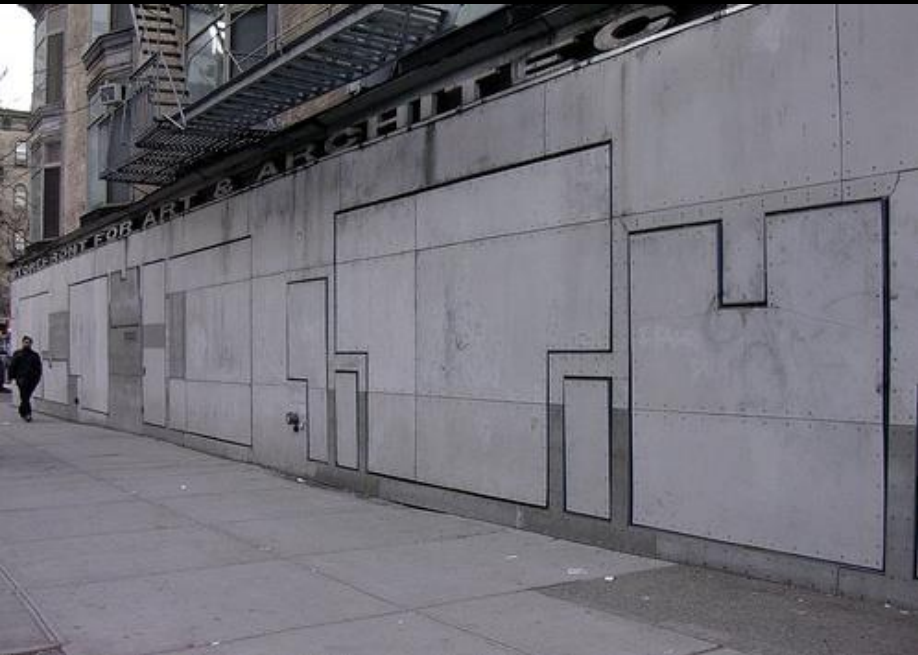
Cancel Save Draft **Submit**

COMMENTS

Rumeysa Aksoy

4: in class – discussion of examples of students

5: in class – introduction of new examples and background, discussion



6: in class – group work - ‘puzzles’



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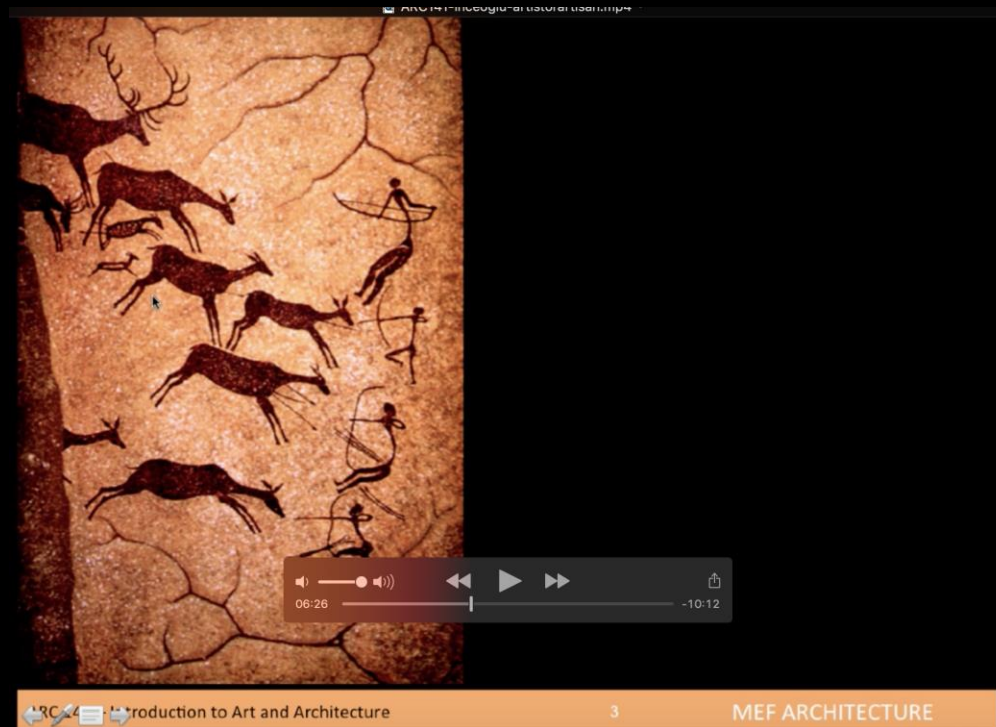


7: in class – presentation of ‘solutions’

Example flow

theme: reality (representation of human form in art)

1: before class – introduction of the concept, a short video





Portrait of Hesy-Ra,
2770 BCE
Physician

Portrait,
2550 BCE
Giza, Egypt

Functional tool. Helps to preserve the spirit
for eternity.
Similar function as a mummy.



Discobolos,
450 BCE
Myron



2: before class – questions:

how realistic is the representation in the given image?

3: before class – answers and feedback:

4: in class – discussion of examples of students

5: in class – introduction of new examples and background, discussion

**Brothers Cleobis and Biton
Polymedes of Argos
590 BCE**



ARC 141 – Introduction to Art and Architecture

13

MEF ARCHITECTURE

Greek vase,
540 BCE
Akhilleus and Ajax
playing board game
Black Figure Style



6: in class – group work - ‘puzzles’



Question 1:

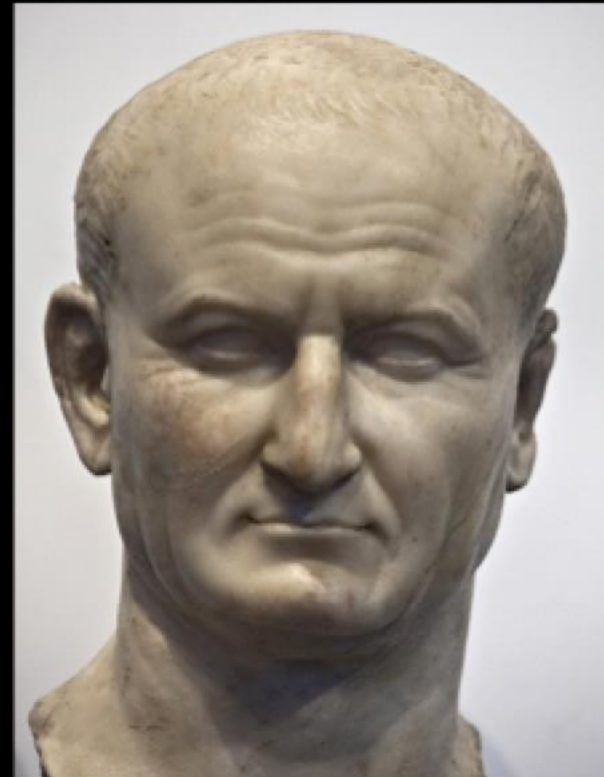
Compare these two depictions for their similarities and differences in representing people and events.

Hermes,
340 BCE,
Praxiteles



Question 2:

Vespasian,
70 CE,



Compare these two portraits for their 'realism'

It needs to be said that flipping any course seems to be a process that takes a few semesters to adjust to the specific needs of the course, pedagogical inclinations of the instructor and behavioral habits of the students.

How to design a flipped theory course is itself a learning process since it seems to be field and culture specific.

It is clear that taking the instruction out of the classroom in the form of a video and expecting the students embrace that new learning structure fully is not realistic just by itself.

Depending on the students' secondary education culture and the field they are studying, methods to make sure they interact with the before-class material need to be developed.

In the case of that course described, the introduction of assignments students need to do after watching the videos and before coming to class worked well.

The flipped structure seems to be effective in an introductory theory course such as the one described here.

In all four iterations of the course, students were very willing to get involved in class activities, discussions and group work.

With the final adjustments, it was observed that more students would come to class prepared. Thus, it has been possible to follow the original course plan to the full extent and reach educational objectives.

The Flipped structure benefits the students in a theory course due to the very strong interaction between students and instructor as well as between students themselves.

