

2D, 3D, AND TIME-BASED DIGITAL APPLICATIONS
IFSA-Butler Reimagining Europe Semester Program in Prague

Suggested US semester credit hours: 4 credits

Contact hours: 60

Course level: 300

IFSA-Butler course code: CME380-16

Course length: Semester

Delivery method: Face to face

Language of Instruction: English

COURSE DESCRIPTION

This course aims to develop learners' skills in using a broad set of software applications through the use of 2D, 3D and time-based digital techniques. This course introduces learners to 2D, 3D and time-based digital applications. The scope offered to the designer working with these interactive tools is wide ranging. Creative approaches can be applied to exploring the potential of software applications in extending drawing and painting techniques. There are possibilities for both artists and designers to develop new strategies in working practices through reflection and reaction to the results of digital experimentation. In this course learners should explore bitmap and vector graphic applications, and address the constraints associated with modelling 3D. They should also reflect on the potential of time-based software to be applied to creative and effective presentations of these elements.

STUDENT LEARNING OBJECTIVES

Students who successfully complete this course will:

- Be able to carry out a sustained exploration of 2D mark making techniques using software tools
- Be able to develop the potential of images using digital techniques
- Be able to carry out a sustained exploration of 3D modelling software
- Be able to present outcomes using time-based presentation software
- Strengthen critical thinking skills
- Become familiar with resources available for further research on 2D, 3D, and time-based digital applications
- Make cognitive connections between learning in this course and other learning experiences in the IFSA-Butler Reimagining Europe Semester Program in Prague

COURSE DELIVERY

Students are expected to read or view resources in advance and be prepared to actively discuss them in class. In each meeting, the instructor will overview the topic and then facilitate a group discussion, drawing out relevant themes, following up on specific lines of inquiry, and prompting students' thoughtful engagement with the topic. Students are encouraged to bring their prior learning experiences into class discussions and to make cognitive connections between this course and others in the IFSA-Butler Reimagining Europe Semester Program in Prague whenever possible. Theories of experiential learning and integrative learning therefore undergird the dynamic learning environment of this course.

This course utilizes an interactive approach to teaching that focuses on the individual student's needs. This approach to teaching and learning aims to foster a challenging but caring environment that allows students to explore, create, and test themselves and their ideas in a safe place.

COURSE SCHEDULE

Weeks	Content Delivery
1 - 3	Week1- texture and 2D/3D rendered scenes research Week2/3- texture principles presentation, creation of textures, and texture construction tutorial Week2/3- creation of 3D space plans Those tasks will form the basis for the creation of the second assignment
4 -5	Presentation in class of the future project using your researches Preparation of an Artistic 3D real time environment using 3D game technologies
5 - 9	Creation of 3D environments and shapes/objects
9 -13	Materials, lighting, rendering, assembling and exporting
14 - 15	Finalization/submission/presentation Finalization of the Artistic 3D real time environment using 3D game technologies

EVALUATION METHODS

The course instructor will determine specific assignments (including paper topics), projects, and exams for the course. Your work on individual assignments and projects will be guided by grading rubrics provided by the course instructor. Your final grade in the course will be arrived at through assessment methods determined by the course instructor and according to the percentages

attached to each assignment and exam by the course instructor. Participation will constitute a determined percentage of your grade. Participation includes attendance, preparation, engagement in discussion, civility, and respect.

Assignment Number	Type of Assignment	Description and Areas Assessed
1	Preparation of an Artistic 3D real time environment using 3D game technologies	Material covered during weeks 1-5
2	Finalization of the Artistic 3D real time environment using 3D game technologies	Material covered during weeks 6-14 (week 15 reserved for presentations)

Timely Submissions

Assignments submitted after the deadline will be accepted at the discretion of the course instructor and generally only in the event of a documented illness or emergency.

READING LIST

Christoph Blase, Margaret Morse (eds), *Hardware, Software, Artware - Art Practice at the ZKM Institute for Visual Media, 1992–1997*, ZKM Karlsruhe, Cantz, Ostfildern Verlag, 1997.

Michael Gleich and Jeffrey Shaw, *The Web of Life – Linking Art and Science*, Aventis Foundation and ZKM Karlsruhe, 2004.

Grau, Oliver, *Virtual Art: From Illusion to Immersion*, Cambridge, MA: MIT Press, 2003.

Frank Popper, *From Technological to Virtual Art*, Cambridge, MA: MIT Press, 2007.

Frank Popper, *Art of the Electronic Age*, Thames & Hudson, 1997.

Stephen Wilson, *Information Arts: Intersections of Art, Science and Technology*. Cambridge, MA: MIT Press, 2002.

https://en.wikipedia.org/wiki/Video_games_as_an_art_form

ACADEMIC INTEGRITY

Any academic endeavor must be based upon a foundation of honesty and integrity. Students are expected to abide by principles of academic integrity and must be willing to bear individual responsibility for their work while studying abroad. Any academic work (written or otherwise) submitted to fulfill an academic requirement must represent a student's original work. Any act of academic misconduct, such as cheating, fabrication, forgery, plagiarism, or facilitating academic dishonesty, will subject a student to disciplinary action.

IFSA-Butler takes academic integrity very seriously. Students must not accept outside assistance without permission from the instructor. Additionally, students must document all sources according to the instructions of the professor. Should your instructor suspect you of plagiarism, cheating, or other forms of academic dishonesty, you may receive a failing grade for the course and disciplinary action may result. The incident will be reported to the IFSA-Butler resident director as well as your home institution.