Course description

Department/Unit /	KGI / GDZ3D		Academic Year	2023/2024
Title	Introduction to 3D Graphics		Type of completion	Pre-Exam Credit
Accredited/Credits	Yes, 3 Cred.		Type of completion	
Number of hours	Seminar 3 [Hours/Week]			

Occ/max	Status A	Status B	Status C			
Summer semester	23 / -	0 / -	0 / -	Course credit prior to	NO
Winter semester	0 / -	0 / 2	0 / 1	Counted into average	NO
Timetable	Yes			Min. (B+C) students	10
Language of instruction	Czech			Repeated registration	NO
Optional course	Yes			Semester taught	Winter, Summer
Evaluation scale	S	N			Internship duration	0
No. of hours of on-premise					
Auto acc. of credit	Yes in the case of a previous evaluation 4 nebo nic.				
Periodicity	K				
Substituted course	KDE/GDZ3D				
Preclusive courses	N/A				
Prerequisite courses	N/A				
Informally recommended courses	N/A				
Courses depending on this Course	N/A				

Course objectives:

The aim of the course is to provide the students with competence to the effective use of software to create end edit 3-D models; to teach them practically and theoretically to handle the important procedures, to be able to use this software according to own needs and to orientate in its environment.

Requirements on student

Credit requirements:
- regular attendance in seminars,
- completing all partial seminar tasks
- independent model development according to specified parameters in time

Content

1. Getting acquainted with the semester plan and teacher´s requirements (semestral project). Initiate students into Rhinoceros setting.
2. Orientation in virtual 3D environment, using Rhinoceros tools.
3. Creating simple objects using line, refracted line.
4. Creating simple objects using curve. Editing curves - cutting, separating, joining.
5. Editing the curves through "Curves tools".
6. Creating objects as a ring, a square etc.
7. Using tools for creation letters and text.
8. Creation simple plane surfaces through created curves. Joining, cutting, separating.
9. - 10. Editing simple plane surfaces through relevant tools.
11. Creating simple objects from curves or surfaces.
12. - 13. Creating the scene using basic tools for visualisation.

Practical training is regularly accompanied by a theoretical interpretation of the teacher.

Fields of study

Guarantors and lecturers

- **Guarantors:** MgA. Jan Zelinka
- **Seminar lecturer:** MgA. Mgr. Michal Poustka (100%), MgA. Jan Zelinka (100%)

Literature

- **Basic:** Puncman, Petr. *Modelujeme v programu Rhinoceros 3D*. Plzeň : Západočeská univerzita, 2008.
- **Recommended:** *Manuál k aktuální verzi programu Rhinoceros.*
- **Recommended:** *web stránky s postupy modelování.*

Time requirements

All forms of study

Activities	Time requirements for activity [h]
Individual project (40)	20
Contact hours	39
Undergraduate study programme term essay (20-40)	20
Total:	**79**

assessment methods

Knowledge - knowledge achieved by taking this course are verified by the following means:

Seminar work

Continuous assessment

Skills - skills achieved by taking this course are verified by the following means:

Skills demonstration during practicum

Project

Practical exam

Competences - competence achieved by taking this course are verified by the following means:

Seminar work

prerequisite

Knowledge - students are expected to possess the following knowledge before the course commences to finish it successfully:

to compare and analyze different artistic expressions by criteria of esthetics, semiotics and technique on basic level,

to reproduce knowledge of historical and recent artistic styles and canons,

to reproduce knowledge about visual means suitable for animated creation,

Skills - students are expected to possess the following skills before the course commences to finish it successfully:

to work independently and flexibly react to evaluating commentary of the teacher

to show own creativity on generally assigned task, to show the will to find different artistic solutions, alter them and constructivelly evaluate

to make the effort to do artistic experiment and to find original and suitable solution to assigned matter

to be able to use on basic level computer guided and digital programs for creation of graphics, animations, etc.

Competences - students are expected to possess the following competences before the course commences to finish it successfully:

N/A

N/A

N/A

teaching methods

Knowledge - the following training methods are used to achieve the required knowledge:

Students' portfolio

One-to-One tutorial

Seminar classes

Skills - the following training methods are used to achieve the required skills:

Skills demonstration

Students' portfolio

Competences - the following training methods are used to achieve the required competences:

Discussion

learning outcomes

Knowledge - knowledge resulting from the course:

of basic tools and procedures of creating, editing and basic visualizing od 3D model,

of particular steps and procedures and their alterations and substitudes in different specific instances,

of options of usage of 3D vizualization in own discipline,

Skills - skills resulting from the course:

to individually model an object in program Rhinoceros based on given parameters and in given time,

to use basic procedures for creating, editing and basic visualizatioon of 3D models,

to effectively use basic tools,

to present own work and defend in criteria of technics and aesthetics,

Competences - competences resulting from the course:

N/A

N/A

N/A

Course is included in study programmes:

Study Programme	Type of	Form of	Branch	Stage	St. plan v.	Year	Block	Status	R.year	R.
Fine Arts	Bachelor	Full-time	Illustration and Graphic Art, specialization Graphic Design	1	4	2023	Povinné předměty	A	1	LS
Fine Arts	Bachelor	Full-time	Illustration and Graphic Art, specialization Visual Communication	1	4	2023	Povinné předměty	A	1	LS
Graphic Design and Illustration	Bachelor	Full-time	Graphic Design and Digital Media	1	1	2023	Povinné předměty	A	1	LS
Graphic Design and Illustration	Bachelor	Full-time	Graphic Design and Visual Communication	1	1	2023	Povinné předměty	A	1	LS