

**University de Piura (UDEP)**  
Sillabus 2022-I

**1. COURSE**

CS351. Topics in Computer Graphics (Elective)

**2. GENERAL INFORMATION**

- 2.1 Credits : 4
- 2.2 Theory Hours : 2 (Weekly)
- 2.3 Practice Hours : 2 (Weekly)
- 2.4 Duration of the period : 16 weeks
- 2.5 Type of course : Elective
- 2.6 Modality : Face to face
- 2.7 Prerequisites : CS251. Computer graphics . (7<sup>th</sup> Sem)

**3. PROFESSORS**

Meetings after coordination with the professor

**4. INTRODUCTION TO THE COURSE**

In this course you can delve into any of the topics Mentioned in the area of Graphics Computing (Graphics and Visual Computing - GV).

This course is designed to perform some advanced course suggested by the ACM / IEEE curriculum. [Hug+13; HB90]

**5. GOALS**

- That the student uses computer techniques Graphs that involve complex data structures and algorithms.
- That the student apply the concepts learned to create an application about a real problem.
- That the student investigate the possibility of creating a new algorithm and / or new technique to solve a real problem

**6. COMPETENCES**

Nooutcomes

Nospecificoutcomes

**7. TOPICS**

Unit 1: Advanced Topics on Computer Graphics (0)	
Competences Expected: a,b,m	
Topics	Learning Outcomes
<ul style="list-style-type: none"><li>• CS355. Advanced Computer Graphics</li><li>• CS356. Computer animation</li><li>• CS313. Geometric Algorithms</li><li>• CS357. visualization</li><li>• CS358. Virtual reality</li><li>• CS359. Genetic algorithms</li></ul>	<ul style="list-style-type: none"><li>• Advanced Topics on Computer Graphics</li></ul>
Readings : [Soars022S], [Soars022W], [Soars022T], [Cambridge06], [MacGrew99]	

## 8. WORKPLAN

### 8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

### 8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

### 8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

## 9. PLANNING

DATE	TIME	SESSION TYPE	PROFESSOR
See at EDU	See at EDU	See at EDU	See at EDU

## 10. EVALUATION SYSTEM

\*\*\*\*\* EVALUATION MISSING \*\*\*\*\*

## 11. BASIC BIBLIOGRAPHY

[HB90] Donald Hearn and Pauline Baker. *Computer Graphics in C*. Prentice Hall, 1990.

[Hug+13] John F. Hughes et al. *Computer Graphics - Principles and Practice 3rd Edition*. Addison-Wesley, 2013.