Peruvian Computing Society (SPC)
School of Computer Science
Sillabus 2021-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 Prerrequisites	:	CS251. Computer graphics . (7th 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

a) An ability to apply knowledge of mathematics, science. (**Usage**)

b) An ability to design and conduct experiments, as well as to analyze and interpret data. (**Usage**)

l) Develop principles research in the area of computing with levels of international competitiveness. (**Usage**)

m) Transform your knowledge of the area of Computer Science into technological enterprises. (**Usage**)

7. SPECIFIC COMPETENCES

■NoSpecificOutcomes■

8. TOPICS

Unit 1: Advanced Topics on Computer Graphics (0)	
Competences Expected: a,b,m	
Topics	**Learning Outcomes**
• CS355. Advanced Computer Graphics • CS356. Computer animation • CS313. Geometric Algorithms • CS357. visualization • CS358. Virtual reality • CS359. Genetic algorithms	• Advanced Topics on Computer Graphics
Readings : [Soars022S], [Soars022W], [Soars022T], [Cambridge06], [MacGrew99]	

9. WORKPLAN

9.1 Methodology

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

9.2 Theory Sessions

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

9.3 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.

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.