1. COURSE
CS100. Computing Foundations (Mandatory)

2. GENERAL INFORMATION
2.1 Course	:	CS100. Computing Foundations
2.2 Semester	:	1er Semestre.
2.3 Credits	:	2
2.4 Horas	:	3 HT;
2.5 Duration of the period	:	16 weeks
2.6 Type of course	:	Mandatory
2.7 Learning modality	:	Face to face
2.8 Prerequisites	:	None None

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE
La Ciencia de la Computación es un campo de estudio enorme con muchas especialidades y aplicaciones. Este curso brindará a sus participantes, una visión panorámica de la informática y mostrará sus campos más representativos, como son: Algoritmos, Estructuras de de Datos, Sistemas Operativos, Bases de Datos, etc.

5. GOALS

- Brindar un panorama del área del conocimiento que es cubierta en la ciencia de la computación.

6. COMPETENCES

1) Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. (**Familiarity**)

4) Recognize professional responsabilities and make informed judgments in computing practice based on legal and ethical principles. (**Familiarity**)

5) Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. (**Familiarity**)

6) Apply computer science theory and software development fundamentals to produce computing-based solutions. (**Familiarity**)

7) Develop computational technology for the well-being of all, contributing with human formation, scientific, technological and professional skills to solve social problems of our community. (**Familiarity**)

7. TOPICS

Unit 1: (2)	
Competences Expected:	
Topics	**Learning Outcomes**
- Introducción a la computación. - Historia de la computación.	Encourage students to study Computer Science. [Familiarity]
Readings : [Bro15]	

Unit 2: Lógica básica (2)	
Competences Expected:	
Topics	**Learning Outcomes**
- Lógica proposicional. - Conectores lógicos. - Tablas de verdad. - Forma normal (conjuntiva y disyuntiva)	- Convertir declaraciones lógicas desde el lenguaje informal a expresiones de lógica proposicional y de predicados [Familiarity] - Aplicar métodos formales de simbolismo proposicional y lógica de predicados, como el cálculo de la validez de formulas y cálculo de formas normales [Familiarity]
Readings : [Bro15]	

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. EVALUATION SYSTEM

********* EVALUATION MISSING ********

10. BASIC BIBLIOGRAPHY

[Bro15] J. G. Brookshear. *Computer Science: An Overview*. 12th. Addison-Wesley, 2015.