

### Identification of the teaching subject

Title: Computer-Aided Design (CAD)

Course Category: Methodological

Number of Credits: 4                      Coefficient: 3

Total Weekly Class Hours:

- Lectures (hours per week): 1.5 hours
- Tutorials (hours per week): 3 hours
- Practical Work (hours per week): /

### Head of the teaching subject

Family name, First name, Grade : Dr. BOUSSOUF Mouatez Billah - MCA -  
Location of office : /

Email : mouatez.boussouf@univ-constantine3.dz

Phone (Optionnal) : 0557 65 37 66

Course schedule and course location: Jeudi 08:30 – 13h , BI1

### Description of the teaching subject

**Prerequisites:** The student should have a basic understanding of cartography, scale, and graphic semiotics (coded drawing).

**General Objective of the Teaching Subject:** To learn how to use specialized CAD (Computer-Aided Design) software (AutoCAD) for site planning.

**Learning Objectives:** By the end of the course, the student will be able to:

- Distinguish between Raster and Vector graphics.
- Download, insert, and vectorize Raster images.
- Use layers to facilitate drawing, editing, and presentation work.
- Utilize hatching to differentiate land use.
- Create a layout, export, and/or print the plan.

### Evaluation Methods

Nature of Assessment	Weighting in %
Exam	33
Supervised practical work	67
<b>Total</b>	<b>100%</b>

### References & Bibliography

Autodesk, Guide de l'AutoCad

CADFolks 2015, AutoCAD 2016 For Beginners. CreateSpace Independent Publishing Platform.

Cauvin, Colette, Francisco Escobar, and Aziz Serradj 2008 Cartographie thématique : Tome 4, Des transformations renouvelées. Paris: Hermes Science Publications.

FANE, Bill 2016, AutoCAD 2017 et LT 2017 pour les Nuls. Paris: First Interactive.

Frappier, Olivier Le, and Jean-Yves Gouez 2015 AutoCAD 2016 - Des fondamentaux à la présentation détaillée. St-Herblain: Editions ENI.

Gilles Palsky 2017, La Sémiologie graphique de Jacques Bertin a cinquante ans ! université de Paris 1 Panthéon-Sorbonne, <https://visionscarto.net/la-semiologie-graphique-a-50-ans>

Jacques Bertin (1967), Sémiologie graphique. Les diagrammes. Les réseaux. Les cartes, Paris/La Haye, Mouton ; Paris, Gauthier-Villars.

Lambert, Nicolas, and Christine Zanin 2016, Manuel de cartographie - Principes, méthodes, applications: Principes, méthodes, applications. Armand Colin.

Roche, Y. (2010). Compte rendu de [CAUVIN, Colette, ESCOBAR, Francisco et

SERRADJ, Aziz (2008) *Cartographie thématique 4. Des transformations renouvelées.*

Paris, Hermès, 198 p. (ISBN 978-2-7462-2207-6)]. *Cahiers de géographie du Québec*, 54 (151), 222–223. <https://doi.org/10.7202/044379ar>

#### VIDEOGRAPHY

Alexandre BLONDEAU 2016, les fondamentaux d'AutoCad 2016, Alphorm

Alexandre BLONDEAU 2016, Perfectionnement, d'AutoCad 2016, Alphorm

Scott ONSTOTT 2016, AutoCad 2016 Essential training, Lynda

## Course Schedule

Week	Course/Session Title	Date
1	Review of Basic Cartography Concepts (map, plan, scale, data sources, data collection, types of representations)	28.09.2023
2	Installation and Introduction to the Software	05.10.2023
3	Raster Graphics: Downloading High-Resolution Google Image, Inserting Image in AutoCAD, Scaling	12.10.2023
4	Scaling of Maps or Raster Images	19.10.2023
5	Work Organization and Layer Creation (Breaking Down Space into Layers)	26.10.2023
6	Reproduction and Modification of a Plan	02.11.2023
7	Drawing Tips for Subdivision Design 1: Adhering to Urban Planning Regulations	09.11.2023
8	Drawing Tips for Subdivision Design 2: Semiotics, Hatching, and Annotation	16.11.2023
9	Blocks and AutoCAD Library	23.11.2023
10	Cross-Section and Plan View	30.11.2023
11	Cross-Section and Plan View + Rendering	07.12.2023
12	Simulation of Printing in Different Formats	14.12.2023
13	Evaluation Exercise	21.12.2023
	<b>End-of-Semester Exam</b>	
	<b>Retake Exam</b>	

Date :05.10.2023

Teacher's Signature

