

Lecture Plan
Department of Planning, School of Planning and Architecture, Vijayawada

Name of Course: Introduction to Information Systems (MPIS102)

Programme & Sem: **Master of Planning (PG), Semester One**

Course Duration: July 10 to Nov 03, 2017

Course Coordinator: Natraj Kranthi, Dr., Associate Prof., Dept. of Planning
(natraj@spav.ac.in)

Number of Credits: 03

Total Periods/Week: 03 (See Time Table for details)

Internal Assessment: 50 (minimum pass marks 50%)

End Evaluation: 50 (minimum pass marks 50%)

Total Marks: 100 (to be converted to CGPA credit pattern as per regulations)

Subject Objective: *To introduce the information systems and develop basic computing skills relevant to planning.*

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode (Optional)	References / Suggested Readings
Week 1 (starting August 01 -04)	Introduction to information systems – hierarchy, types, components and flows	Lecture	Whiteley, David. An Introduction to Information Systems, Palgrave Macmillan Publishers Ltd., US. 2013 (Part-3)(BOOK)
Week 2 (starting August 07 - 11)	Introduction to information systems for planning	Lecture	Anil K.Jamwal. 'Geographic Information Systems', Jnanada Prakashan, New Delhi. 2008. (Chap1) (BOOK)
Week 3 (starting August14-18)	Assessment – 1 : Submission of CAD Drawings (Portfolio)	Discussion and interaction	
Week 4 (starting August 21-25)	Introduction to CAD software – model and layout space, drawing and editing tools	Lecture and demo	Tickoo, Sham. Exploring AutoCAD Map 3D 2017 Cadcim Technologies, Gurgaon, India. 2016. (BOOK)
Week 5 (starting August 28-Sep01)	Lab exercises in CAD drawings and map preparation	Hands on practice	Lecture Handouts
Week 6 (starting Sep 04)	Field Work		
Week 7 (starting Sep 11-15)	Lab exercises in CAD drawings and map preparation	Hands on practice	Lecture Handouts
Week 8 (starting Sep 18-22)	Assessment – 2 (Sept 18-22): Submission of GIS drawings / maps (raster based) (Portfolio)		

Lecture Plan
Department of Planning, School of Planning and Architecture, Vijayawada

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode (Optional)	References / Suggested Readings
Week 9 (starting Sep 25-29)	Spatial data sources - Open source data and proprietary, satellite data Official organisations	Demo	Relevant official websites / portals
Week 10 (starting Oct 02-06)	Introduction to concepts of geoinformatics: Spatial data -raster (digital imagery) and vector, non-spatial data (DBMS), data sources, Spatial Data Infrastructure, etc. Introduction to GIS software (raster based)- Coordinate systems, Georeferencing and projections, geodetic data.	Lecture and demo	Peter M Atkinson. 'Geoinformatics'. Eolss Publishers. Oxford,UK. 2009. (Chap 1) (BOOK) George Joseph. 'Fundamentals of Remote Sensing'. Universities Press. 2005. (Chap1) (BOOK)
Week 11 (starting Oct 09-13)	Lab exercises in GIS drawings and map preparation	Hands on practice	Lecture Handouts
Week 12 (starting Oct 16-20)	Introduction to GIS software (vector based)	Lecture and demo	Kennedy, Michael. 'Introducing Geographic Information Systems with ArcGIS: A Workbook Approach', Third Edition, Wiley, US. 2013. (Chap 6,7,8) (BOOK)
Week 13 (starting Oct 23-27)	Assessment – 3 (from Oct 23-27): Submission of GIS drawings / maps (vector based) (Portfolio)	Discussion and interaction	
Week 14 (starting Oct 30- Nov 03)	Lab exercises in GIS drawings and map preparation	Hands on practice	Lecture Handouts
	Lab exercises in GIS drawings and map preparation	Hands on practice	Lecture Handouts
	Web GIS Location Based Services – GPS	Lecture and demo	Fu, Pinde. Getting to Know Web GIS. ESRI Press, 2016 (BOOK)
	Cloud computing; Characteristics and components; 3D visualization; Big data management; Online Analytical processing; Data warehousing and data mining; Data sharing and security.	Lecture	Richard G., and McLaughlin J. Geospatial Data Infrastructure Concepts, Cases and Good practice. Oxford Unviersity Press, Oxford. 2010
Nov 03	Revisions and Finalisation of Internal Marks	Presentation & Interactive session	--

Lecture Plan
Department of Planning, School of Planning and Architecture, Vijayawada

Note:

1. Any other closed holidays as declared by SPAV shall supercede the above lecture plan. Holidays shown above may alter as per Notice from time to time.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided is not exhaustive and is subject to addition – students are advised to follow progression of class to keep abreast of the new reading lists, if any.