



Department of Planning,
Lecture Plan, Odd Semester, AY 2025-26

Name of Course: Bachelor of Planning

Subject Name:	Computer Applications in Planning (PLN112)
Year & Sem:	1 st Year 1 st Semester
Course Duration:	21 st July to 12 th November 2026
Course Coordinator:	Mr. Shubham S. Magre, Assistant Professor, DoP
Number of Credits:	3
Subject Category:	JC
Total Periods/Week:	3
Internal Assessment	50
End Evaluation	50
Total Marks	100
Total No. of Internal Assessment & Mode	3 – Assignments / Practical

Subject Objective: To develop proficiency in the use of basic software and application in physical planning.

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	Reference/ Suggested Readings
Week 1-	<u>Unit-I</u> Introduction to Computer Applications in Planning, Microsoft Word and Google Docs, File management and Google Drive, Basics of layouts, document elements, tables and charts.	Lecture, Discussion & (Lab) Practical	1. Peter Norton, <i>Introduction to Computers</i> (Computer Fundamentals). 2. Microsoft Word Training (Microsoft Learn). 3. Google Workspace Learning Centre – Google Docs & Drive.
Week 2	Referencing, index, styles, standards. Collaboration using Google Docs (Comments, Sharing, Version History).	Lecture & Practical (Lab)	1. Joan Lambert, <i>Microsoft Word Step by Step</i> . 2. Google Docs Help Centre. 3. Microsoft Learn – Word Documentation.
Week 3	Report preparation, Microsoft PowerPoint and Google Slides, Introduction to Canva for presentation templates and planning posters.	Lecture & Practical (Lab)	1. Joan Lambert, <i>Microsoft PowerPoint Step by Step</i> . 2. Google Slides Help. 3. Canva Design School (Presentation Design).
Week 4	Microsoft Excel and Google Sheets, Formulae, charts, sorting, filtering, Pivot Tables, Import/export of data.	Lecture & Practical (Lab)	1. Sandy Stachowiak (2018), <i>The Beginner's Guide to Microsoft Excel</i> . 2. Microsoft Excel Help. 3. Google Sheets Learning Centre.
Week 5	<u>Unit-II</u> Introduction to database management	Lecture, Discussion	1. Elmasri & Navathe, <i>Fundamentals of Database Systems</i> . 2. Google Forms Help Centre.



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Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	Reference/ Suggested Readings
	Information systems in planning discipline; Google Forms (Introduction); Exporting survey responses to Google Sheets.	& Practical (Lab)	3.NIUA Digital Resources.
Week 6 & 7 23 rd Aug-6 th Sep 2025	Field Work		
Week 8	National Spatial data management system, National Urban Information system, Census Portal, Bhuvan, NIUA Digital Resources	Lecture, Discussion & Practical (Lab)	1.NSDI Guidelines. 2. Bhuvan User Manual. 3. Census of India Digital Portal. 4. NIUA Knowledge Portal.
Week 9 15-19 th September	Mid- Semester Assessment week		
Week 10	<u>Unit-III</u> Introduction to CAD-Interface, Coordinates, Layers, Drawing setup.	Lecture, & Practical (Lab)	1. Douglas Seidler (2007), <i>Digital Drawing for Designers</i> . 2. Autodesk AutoCAD Official Tutorials. 3. Autodesk Learning Centre.
Week 11	Drawing Commands - Line, Polyline, Circle, Rectangle, Hatch, Offset, Object Snap	Practical (Lab)	
Week 12	Workshop -		
Week 13	<u>Unit-IV</u> Editing Commands Move, Copy, Rotate, Mirror, Array, Trim, Extend and Scale	Lecture, Discussion & (Lab) Practical	4. CAD Standards Manual
Week 14	Common errors in scaling, printing, exporting and importing; Creating mom-printed output, exporting a model to a 3D dwf; Print and plot concepts.	Lecture & (Lab) Practical	5. Autodesk Help.
	Guest Lecture		
Week 15	<u>Unit-V</u> Introduction to CAD drawings, image editing using	Lecture, Discussion	1. Google Workspace Learning Centre. 2. Canva Design School.



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Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode	Reference/ Suggested Readings
	Canva/basic photo editing software, audio and visual editing software, statistical tools; application of these tools in planning discipline and e-Governance.	& (Lab) Practical	3. NIUA Smart City Digital Resources.
Week 16	Introduction to GIS, Google Earth Pro, Spatial Data Visualization	Lecture, & (Lab) Practical	1.FUNDAMENTALS OF GIS, Department of remote sensing and GIS, School of earth and environmental science uttarakhand open university
Week 17 end of class work	Portfolio making & Presentation, Course Review, Revision.	Lecture, Discussion & (Lab) Practical	

Details of Internal Assessments

Tentative Date/Week of the Assessment	Mode of Assessment	Marks of the Assessment
<u>Week 5</u>	Print Submissions /Google classroom submissions	<u>10</u>
<u>Week 10</u>	Print Submissions /Google classroom submissions	<u>10</u>
<u>Week 15</u>	Practical Exam/Viva &Prints Submissions	<u>10</u>

Reference books/Readings:

1. Douglas Seidler R. (2007), *Digital Drawing for Designers – A Visual Guide to AutoCAD*, Fairchild Publications.
2. Lillesand, T.M. & Kiefer, R.W. (2015), *Remote Sensing and Image Interpretation*, Wiley.
3. Sandy Stachowiak (2018), *The Beginner's Guide to Microsoft Excel*.
4. Peter Norton, *Introduction to Computers*.
5. Microsoft Learn – Microsoft Office Documentation.
6. Google Workspace Learning Centre (Docs, Sheets, Slides, Drive, Forms).
7. Autodesk AutoCAD Learning Resources.
8. Canva Design School.

Note:



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1. Any other closed holidays as declared by SPAV shall supersede 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.

Signature of the Faculty