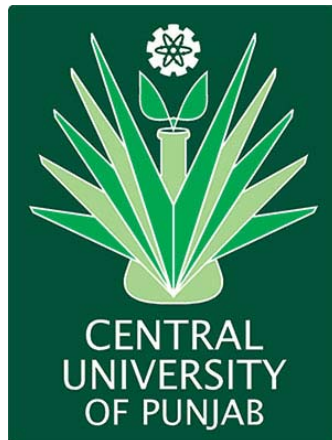


**CENTRAL UNIVERSITY OF PUNJAB, BATHINDA**



***Master of Arts in Geography***

**Academic Session 2019-21**

**Department of Geography and Geology**

- Siddhartha, K. (2017), Geography through maps, Kitab Mahal.
- Hussain, Majid (2016), Models in Geography, Rawat Publishers, Jaipur.

<b>Course title</b>	Introduction to GPS (VAC)	<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>Course code</b>	GEO.504	-	1	-	-
<b>Total Hour:</b> 15 Hours					
<b>Learning Outcome:</b> The student will opt for courses that are provide at university level.					
<b>Unit I</b>					
Introduction to GNSS (Global Navigation Satellite System): Basic Concepts, Background, types and Application in various field.					
<b>Unit II</b>					
Introduction to GPS (Global Positioning System): Background, Component and uses in various field.					
<b>Unit III</b>					
Collections of GCPs (Ground Control Points): Hands on exercise using point, line and polygon.					
<b>Unit IV</b>					
Transfer of GCPs in system.					
<b>Mode of transaction:</b> Lecture and hands on exercises. PPTs and materials provided to students.					
<b>Suggested Reading:</b>					
<ul style="list-style-type: none"> <li>• Hofmann-wellenhof, B.; Lichtenegger, H. ; Collins, J. ; Hofmann-wellenhof, B. (2013), GPS global positioning system: Theory and practice 5th edition, New Delhi, Springer (india) private limited.</li> <li>• Van Sickle, Jan (2008), GPS for land surveyors, 3rd edition, London, Crc press.</li> </ul>					
<b>Evaluation Criteria:</b> Full Marks – 100					

<b>Course Title</b>	Seminar	<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>
<b>Course Code</b>	GEO.544	-	1	-	1
<b>Total Hour:</b> 15 Hours					
<b>Course Detail:</b>					
The student will prepare a report under the guidance of faculty assigned as supervisor and present it for evaluation.					
<b>Evaluation Criteria</b>					
Literature Strength (out of 20)	Organization of content (out of 20)	Presentation (out of 20)	Discussion (out of 10)	Report Evaluation (out of 30)	Total (out of 100)