

**UNIVERSITY OF REGINA**  
**Department of Computer Science**

**CS 890DS – Visual Analytics**  
**Winter 2014**

Instructor: **Dr. Orland Hoerber**  
Meetings: **F 9:30 – 11:00 AM (CW 308.24)**  
Webpage: **<http://www.cs.uregina.ca/~hoeber/teaching/cs890DS/>**  
Email: **orland.hoeber@uregina.ca**

Office Hours: **M/W: 9:30 – 11:00 AM (other times by appointment only)**  
Office: **CW 308.25**  
Phone: **306-585-4598**

---

### **Calendar Description**

Visual analytics is a multi-disciplinary field that facilitates analytical reasoning through interactive visual interfaces. Topics of study will include aspects of visualization, human factors, and data analysis in aid of conducting an analysis of available data.

### **Course Objectives**

This directed readings course focuses on two primary activities: the development of a literature review and the implementation of a project.

For the literature review, a set of foundational readings will be provided; students will be required to choose a narrow topic within this domain and find additional papers from within the primary conferences and journals in the field. Additional papers from conferences and journals relevant to the specific topic may also be used. A literature review paper must be written that organizes the information in a logical manner.

For the project, students will be required to prepare a project proposal, implement some aspect of a visual analytics system, give a demonstration of their project software, and write a project report.

### **Evaluation**

The final grade in the course will be determined as follows:

Literature Review	Apr 11	30%
Project Proposal	Jan 24	10%
Project Demonstration/Quality of Software	Mar 21	30%
Project Report	Apr 11	30%
<b>Total</b>	<b>100%</b>	

\* Your final mark may be adjusted by +/- 5%, at the instructor's discretion.

## Meetings

Group meetings with all students registered in this course will take place on Fridays from 9:30 – 11:00 in CW 308.24. These meetings will be used to discuss specific papers found by the students, and to provide updates on the project progress. In each meeting, each student will be required to give a brief report of past activities and plans for the coming week.

## Foundational Readings

J. J. Thomas and K. A. Cook. A visual analytics agenda. *IEEE Computer Graphics and Applications*, 26(1):10–13, 2006.

D. A. Keim, G. Andrienko, J.-D. Fekete, C. Görg, J. Kohlhammer, and G. Melançon. Visual analytics: Definition, process, and challenges. In A. Kerren, J. T. Stasko, J.-D. Fekete, and C. North, editors, *Information Visualization: Human-Centered Issues and Perspectives*, LNCS 4950, pages 154–175. Springer, Berlin, 2008.

## Primary Conferences

IEEE Visual Analytics Science and Technology  
IEEE Information Visualization  
The Eurographics Conference on Visualization  
IEEE Pacific Visualization

## Primary Journals

IEEE Transactions on Visualization and Computer Graphics  
Information Visualization

## Grades

All grades will be assigned according to the Undergraduate Calendar, Section 5.9: Grading System and Descriptions:

- 90–100: An outstanding performance.
- 80–89: Very good performance.
- 70–79: Above average performance.
- 60–69: A generally satisfactory and intellectually adequate performance.
- 50–59: A barely acceptable performance.
- 0–49: An unacceptable performance.