using either Statistics Canada 2017 General Social Survey or another survey tailored to your project

**Homework Assignments**: There will be **four (4)** homework assignments, which will be worth **15%** a piece. Dates of distribution and collection are noted below in the tentative calendar of dates.

**Project Proposal**:

## Right to submit in English or French written work that is to be graded:

*right to submit in English or in French any written work that is to be graded* (approved by Senate on 21 January 2009).

## Academic Integrity:

*McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see http://www.mcgill.ca/students/srr/honest/ for more information)*

## Course Outline & Schedule

| | | |
|---|---|---|
| Week 1 | **September 13** | Introduction: Longitudinal Data and Analysis. Stata and Data Sets |
| Week 2 | **September 20** | Basic Concepts in Survival Analysis: Event, Timing, Spell, Censoring and Truncation |
| Week 3 | **September 27** | Life Tables and Survivor Functions |
| Week 4 | **October 4** | Maximum Likelihood Estimation and Parametric Models |
| Week 5 | **October 14** | Parametric Models Continued: Changing Hazards with Time in Exponential Models; Piecewise Exponential Model |
| Week 6 | **October 18** | Discrete Time Models |
| Week 7 | **October 25** | Semi-parametric (Proportional Hazard) Models |
| Week 8 | **November 1** | Time Varying Covariates and Interactions: Exponential and PH Models |
| Week 9 | **November 8** | Non-Proportionality, Stratification and Interaction |
| Week 10 | **November 15** | Specification/Model Selection/Residual Analysis |
| Week 11 | **November 22** | Competing Risks |
| Week 12 | **November 29** | Repeated Events and Data Construction |
| Week 13 | **December 6** | Special Topics/Review. Presentation of studentsô research. |

**Calendar of Exercises and Papers**

| | Distributed | Due |
|---|---|---|
| Exercise 1 | September | |

## Schedule and Readings



## Readings

Gillepsie, Brian Joseph. 2020. ñAdolescent Intergenerational Relationship Dynamics and Leaving and Returning to the Parental Homeò. *Journal of Marriage and Family* 82(3): 997-1014.

9. **Non-Proportionality, Stratification and Interaction** (November 8)
   Cleves et al., 9.3, 10.4, 11.1
   Le Bourdais, Céline, Hélène Desrosiers and Benoît Laplante. 1995. ñFactors Related to Union Formation Among Single Mothers in Canadaò. *Journal of Marriage and the Family* 57(2): 410-420.

10. **Specification/ Residual Analysis/ Weights** (November 15)
    Cleves et al., Chapter 11.2
    Other reading TBA

11. **Competing Risks** (November 22)
    Cleves et al., Chapter 17
    Mernitz, Sara E. 2018. ñA cohort comparison of trends in first cohabitation duration in the United Statesò. *Demographic Research* 38(66): 2073-2086.

12. **Repeated Events and Data Construction** (November 29) ï Invited lecturer: Ana Fostik (Statistics Canada)
    Cleves et al., Chapters 9.4, 15.1
    Hamplová, D., C. Le Bourdais and B. Legendre. 2021. ñPartnersô Relative Income and the Risk of Union Dissolution in Two Institutional Contextsò. *European Sociological Review* 37(4): 525-540.

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