

Course Home Page

- The course home page is NOT on Avenue to Learn. It is on [childsmath](#).

Course Description

- **Course Title:** Statistical Methods for Science
- **Class Times and Locations:** Check [Mosaic](#)

Instructor Information

- **Name:** [Aaron Childs](#)
- **Email:** childsa@mcmaster.ca
- **Office Location:** Hamilton Hall 213
- **Office Hours:** Click [here](#)

Textbook

- **Required:** *Biostatistics for the Biological and Health Sciences*, 2nd Edition, by Triola, Triola, and Roy. Published by Pearson.
- **Note:** You can buy the textbook packaged together with Minitab (if you want to use Minitab at home), or you can buy just the textbook itself (and use Minitab in the campus computer labs, or [rent it](#).)
- **Optional:** Student Solutions Manual

Note: A copy of the textbook and solutions manuals are available on reserve in Thode Library.
(The lab manual is NOT available on reserve in Thode.)

- **Bookstore Link to Course Materials** is [here](#)

Lab Manual

- The lab manual is required, and is available at the bookstore
- The lab manual is the same as last year, and the same as last term.
- Minitab instructions and practice tests are in the lab manual
- You must bring the lab manual with you to the labs

Labs and TAs

- Labs start on Monday January 13th
- You must bring the lab manual, as well as a USB drive with you to the labs
- Attendance is optional. If you can do the assignment/labs on your own, have access to Minitab, and do not need the help of a TA then you don't have to go to the scheduled lab times.
- Information about your TAs can be found on the TA Information Page

Software

- Minitab Release 17 or later (Release 17 is preferred, and older versions should not be used). (Minitab Express should *not* be used.)
- Minitab is available in the following campus computer labs:
 - Burke Science Building (BSB) Rooms 241, 242, 244, 249
 - John Hodgins Engineering Building (JHE) Rooms 233, 234
 - Kenneth Taylor Hall Building (KTH) Rooms B121, B123
- Minitab can be purchased packaged together with the textbook (if you want to use Minitab at home), or you can rent it [here](#)

Material Covered

- All sections covered in the suggested problems
- **Major Topics:** Describing data, graphical representations of data, probability, confidence intervals, hypothesis testing, one-way ANOVA, analysis of categorical data, regression and correlation
- **Approximate Schedule:** Types of Data and Descriptive Statistics (5 lectures), Probability (5 lectures), The Normal Distribution (3 lectures), Confidence Intervals and Hypothesis Testing (9 lectures), Analysis of Variance (3 lectures), Regression and Correlation (7 lectures), Categorical Data (3 lectures), Introduction to Nonparametric Statistics (1 lecture)

Assignment and Survey Information

- You will be required to fill out (or at least read and acknowledge that you have read) [this survey](#). The deadline for the completion of this survey is Friday January 10th at 11:59pm.
- There will be 6 online assignments. Part of these assignments will involve analyzing data from the survey.

Test Information

- Some sample tests are in the lab manual.
- **Tentative Dates** (subject to change):
 - Test #1:** Evening of Monday February 10th
 - Test #2:** Evening of Monday March 16th
- Check the Announcements for room and time information, and for instructions on what to do if you have a conflict with the test time.

Calculator and Formula Sheet

- Only the McMaster Standard Calculator Casio fx-991 MS or MS Plus is allowed on the tests and exam
- The two-page formula sheet at the front of the lab manual will be provided with the tests and exam.

Course Evaluation

- 1 Survey - 1% (participation credit)
- 6 Assignments - 2.5% each
- 2 Tests - 20% each
- Final Exam - 44%
- At the end of the course the grades may be adjusted, but this can only increase your grade and will be done uniformly. We will use the grade equivalence chart published in the Undergraduate

Calendar to convert between percentages and letter grades.

- The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

Missed Work Policy

- If you are absent from the university for a minor medical reason, lasting fewer than 3 days, you may report your absence, once per term, without documentation, using the [McMaster Student Absence Form](#). Absences for a longer duration or for other reasons must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted. When using the MSAF, report your absence to childsa@mcmaster.ca. Please note that the MSAF may not be used for term work worth 25% or more, nor can it be used for the final examination. For more information look [here](#).
- If your MSAF form was received then the word "note" will appear in place of your mark on the marks page. This will show up within one week after you filled out the MSAF form. If you don't see the word "note" in place of your mark for the missed work one week after filling out the MSAF form, then send an email to [Dr. Childs](#). If you do see the word "note" in place of your mark, then no follow-up is required.
- The percentage for a missed test will be added to your final exam.
- The percentage for a missed assignment or lab will be distributed among your remaining assignments or labs.

Academic Dishonesty

- Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.
- It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at <http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf>
- The following illustrates only three forms of academic dishonesty:
 1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
 2. Improper collaboration in group work.
 3. Copying or using unauthorized aids in tests and examinations.

Accommodation of Students With Disabilities

- Students with disabilities who require academic accommodation must contact [Student Accessibility Services](#) (SAS) to make arrangements with a Program Coordinator. [Student Accessibility Services](#) can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information, consult McMaster University's [Academic](#)

[Accommodation of Students with Disabilities policy.](#)

RISO Policy

- Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the [RISO policy](#). Students requiring a RISO accommodation should submit their request to their Faculty Office normally within 10 working days of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.