Syllabus for CSC 152:
Introduction to Computing: Mathematics/Science Applications – Fall 2019

Contact Information:
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Office Hours: (Holroyd 133 or Holroyd 124)
Mon. 2:00 - 3:00
Tues. 10:00 - 11:00
Wed. 3:00 - 4:00
Thurs. 2:00 - 3:00
Or by appointment

Topics: This course provides a survey of problem-solving and computer applications for science and mathematics, including data analysis and regression. It includes an introduction to the design and use of electronic spreadsheets, as well as the use of other computational and programming tools such as R and Mathematica. The course will also include elements of data presentation and visualization. Credit will be given for only one of CSC 151, 152, 153, 154, and 155.

While the course has no science course prerequisite, it will unapologetically focus on examples from science throughout the semester.

Section & credits:
Sections: 31 & 32
Credits: 3
Meetings (Time and Place)
Monday and Wednesday 9:30-10:45 in Holroyd 153 (Section 31)
Monday and Wednesday 11:00-12:15 in Holroyd 153 (Section 32)

Holidays:
Labor day: Sept. 2
Mid-semester break: Oct. 14-15
Thanksgiving: Nov. 27-29

Other important dates:
Classes start: Aug. 26
Last day to add/drop: Aug. 30
Last day to file for Pass/Fail option: Sept. 13
Midsemester grades (for freshmen) due: Oct. 16
Last day to withdraw: Nov. 1

Classes end: Dec. 6
Finals week: Dec. 9 - Dec. 13

Course Calendar Link:
http://www1.lasalle.edu/~blum/c152-cal-f19.htm

Text: None

Resources: The course uses Microsoft Excel, R/R-Studio, and Wolfram Mathematica. Of these applications, only R/R-Studio is available for a free download. However, the applications are available in various student computer labs. Students may bring their own devices to class; however, the instructions provided will be written for PC's (Windows-based systems).

Learning Objectives:

Students should be able to:

- apply problem-solving techniques
- create spreadsheets to display and analyze data, including statistical analysis
- use a spreadsheet to simulate systems
- create and interpret an x-y graph
- write programs that obtain, analyze and present data (e.g. R)
- use a symbolic computation program (e.g. Mathematica)
- locate needed information electronically
- discuss the role of computers and information in scientific investigations
- create documents that display scientific information including data tables, equations, and so on
- visualize and present data from experiments in PowerPoint

Assessment:
There will be weekly labs as well as a weekly homework. There will be three tests and a final. The various components of the course will be weighted as follows:

Lab:	30%
Homework:	10%
Tests:	30% (lowest dropped)
Final:	30%

or if it benefits the student

Lab:	30%
Homework:	10%
Tests:	45% (no drop)
Final:	15%

- The plus/minus grading system will be used.
- Attendance will be taken.

- Absences, lateness, inattention, etc. will be factored into the lab/class component of the grade.
- Over three unexcused absences may result in the reduction of your final grade.
- Homework assignments and labs are due a week after they are assigned. Labs and homework assignments submitted after the test on the relevant material will not be eligible for full credit.
- The lowest of the three test grades will be dropped. The final has a weight equal to two tests. If the final is the lowest grade, it will be counted equal to a test and no test grade will be dropped.
- Make-up tests are given at the discretion of the professor. If you miss a test, you should assume it will serve as your dropped score unless you have met with me to discuss the reason for missing the exam and to schedule a make-up.
- All tests are cumulative, though they will tend to focus on and give more weight to the new material.
- It is your responsibility to keep copies of all of your assignments, tests and so forth at least until you receive your final grade for the course.

Grading scheme:

- A 94 <= average
- A- 91 <= average < 94
- B+ 88 <= average < 91
- B 85 <= average < 88
- B- 82 <= average < 85
- C+ 79 <= average < 82
- C 76 <= average < 79
- C- 73 <= average < 76
- D+ 70 <= average < 73
- D 67 <= average < 70

Classroom Behavior:
While in the classroom, students should behave in a manner that is neither distracting to nor disrespectful to the professor or other students. Cell phones should be turned off.

Cheating:
When using materials from a book, website, etc., the source must be cited, otherwise it is considered plagiarism. Claiming another's work as your own is cheating. A student caught cheating will receive a score of zero. Repeated cheating can result in a failing grade for the course. Asking another for help on a step or two in a many step homework is acceptable; handing in duplicate or nearly duplicate work is not. If you require a significant amount of assistance, you should seek my help. Finally, openly allowing your work to be copied is also cheating.

Some Tutoring:
Tutoring for various subject areas (70+ courses) is available for La Salle undergraduates. Subject tutors help students identify what as well as how to learn, clarify course content, and help students understand their strengths and weaknesses regarding the subject matter. Students should take advantage of tutoring at the first indication of difficulty in a course or whenever they wish

to improve their performance or knowledge in a course, for example, to improve grades or to maintain high grades. Students can make tutoring appointments through GradesFirst located under Tools in the mylasalle portal.

Student Resources:
https://lasalle.instructure.com/courses/1772 includes links to

- Student Guide on how to use Canvas
- Student Guide to Resources, Rights and Responsibilities
- Academic Integrity Policy
- American Disabilities Act
- IT Help Desk Support
- Academic and Learning Support Services
- Library Resources in Canvas
- Library