

Physics 515 - Data Analysis Techniques

Fall 2016

Course website <http://coursespaces.uvic.ca>
Assignments and notes will be posted and completed assignments are to be uploaded to this website.

Instructors

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|----------------|----------|------------------|
| Dean Karlen | ELL 217 | karlen@uvic.ca |
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Lecture schedule

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|------------|------------|---------|
| Wednesdays | 1:30-2:50 | ELL 161 |
| Fridays | 12:30-1:50 | ELL 161 |

Textbooks Purchase the Coursepack from the bookstore for the first part of this course.

Course description An advanced course in data analysis for the physical sciences. The lectures cover probability theory, Monte Carlo methods, statistical analysis techniques, deconvolution, and signal and image processing.

Grading There will be several assignments and a written exam. The final grade is determined as follows:

| | |
|-------------|-----|
| assignments | 75% |
| exam | 25% |

The letter grades are obtained by converting the numerical scores using the conversion table below.

| F | D | C | C+ | B- | B | B+ | A- | A | A+ |
|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0-49 | 50-59 | 60-64 | 65-69 | 70-72 | 73-76 | 77-79 | 80-84 | 85-89 | 90-100 |

Calculator For the exam, the departmental policy will be followed: On all examinations the only acceptable calculator is the Sharp EL-510R. This calculator can be bought in the Bookstore for about \$10. DO NOT bring any other calculator to examinations.

Programming The assignments for the first part of the course will require programming in one of: C++, Java, Python, or MATLAB. Other assignments may require programming in MATLAB. You will need to submit your code with your assignments.

Course experience Near the end of term you will be invited to complete an anonymous survey regarding your learning experience. The survey site is: <http://ces.uvic.ca>