Report Comments

## Recommended Minimum Response Rates

| Class Size | Recommended Minimum Response Rates <br> based on 80\% confidence \& $\pm 10 \%$ margin |
| :---: | :---: |
| $<10$ | $75 \%$ |
| $11-19$ | $65 \%$ |
| $20-34$ | $55 \%$ |
| $35-49$ | $30 \%$ |
| $50-74$ | $25 \%$ |
| $75-99$ | $20 \%$ |
| $100-149$ | $15 \%$ |
| $150-299$ | $10 \%$ |
| $300-499$ | $5 \%$ |
| $>500$ |  |

## Legend

N: Expected
n : Responded
Frequency Distribution
SD: Strongly Disagree
D: Disagree
N: Neutral
A: Agree
SA: Strongly Agree
N/A: Not applicable

## Statistics

IM: Interpolated Median

## Detailed Results

## Lab Questions


3. The expectations for assignments were clearly described to students.

2. If applicable, I feel I was working in a safe laboratory
environment.
1 Strongly Disagree (0)
2 Disagree (0) 3 Neutral (0)
4 Agree (5)
5 Strongly Agree (0)
N/A Not Applicable (3)
[ Total (8) ]
4. The laboratory activities complemented and/or helped to
increase my understanding of the course material.

5. I found the laboratory component of the course to be a valuable educational experience.


| Question | N | n | SD | D | N | A | SA | $\mathrm{N} / \mathrm{A}$ | M | DI |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| The laboratory materials/procedures were presented in a reasonable level of detail <br> and clarity. | 49 | 8 | 0 | 0 | 1 | 5 | 2 | 0 | 4.10 | 0.30 |
| If applicable, I feel I was working in a safe laboratory environment. | 49 | 8 | 0 | 0 | 0 | 5 | 0 | 3 | 4.00 | 0.00 |
| The expectations for assignments were clearly described to students. | 49 | 8 | 0 | 0 | 0 | 5 | 3 | 0 | 4.30 | 0.23 |
| The laboratory activities complemented and/or helped to increase my <br> understanding of the course material. | 49 | 8 | 0 | 0 | 2 | 4 | 2 | 0 | 4.00 | 0.38 |
| I found the laboratory component of the course to be a valuable educational <br> experience. | 49 | 8 | 0 | 0 | 1 | 5 | 2 | 0 | 4.10 | 0.30 |


| Question | \%Favourable |
| :--- | ---: |
| The laboratory materials/procedures were presented in a reasonable level of detail and clarity. | $87.50 \%$ |
| If applicable, I feel I was working in a safe laboratory environment. | $100.00 \%$ |
| The expectations for assignments were clearly described to students. | $100.00 \%$ |
| The laboratory activities complemented and/or helped to increase my understanding of the course material. | $75.00 \%$ |
| I found the laboratory component of the course to be a valuable educational experience. | $87.50 \%$ |

## Lab Instructor Questions


7. I found my instructor in the laboratory to be very good.


| Question | N | n | SD | D | N | A | SA | N/A | IM | DI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The instructor demonstrated a broad knowledge of the subject. | 49 | 8 | 0 | 0 | 0 | 7 | 1 | 0 | 4.07 | 0.11 |
| Students were treated respectfully. | 49 | 7 | 0 | 0 | 0 | 5 | 2 | 0 | 4.20 | 0.20 |
| The instructor was available to students outside of scheduled lab periods. | 49 | 8 | 0 | 0 | 3 | 4 | 1 | 0 | 3.75 | 0.34 |
| The instructor's answers to questions provided me with useful guidance. | 49 | 8 | 0 | 0 | 1 | 7 | 0 | 0 | 3.93 | 0.11 |
| The evaluation procedures were fair. | 49 | 8 | 0 | 0 | 0 | 7 | 1 | 0 | 4.07 | 0.11 |
| The instructor provided effective feedback. | 49 | 8 | 0 | 0 | 1 | 6 | 1 | 0 | 4.00 | 0.22 |
| I found my instructor in the laboratory to be very good. | 49 | 8 | 0 | 0 | 0 | 5 | 3 | 0 | 4.30 | 0.23 |


| Question | \%Favourable |
| :--- | ---: |
| The instructor demonstrated a broad knowledge of the subject. | $100.00 \%$ |
| Students were treated respectfully. | $100.00 \%$ |
| The instructor was available to students outside of scheduled lab periods. | $62.50 \%$ |
| The instructor's answers to questions provided me with useful guidance. | $87.50 \%$ |
| The evaluation procedures were fair. | $100.00 \%$ |
| The instructor provided effective feedback. | $87.50 \%$ |
| I found my instructor in the laboratory to be very good. | $100.00 \%$ |

## Open ended feedback

## What were the strengths of the course?

## Comments

Optional Labs
The labs were really helpful and the assignments were explained properly to those who did not understand it
Helped me understand more about computers.
Was helpful with assignments where the lecture notes weren't.
The labs helped enforce the material we learned in class
Materials are provided before class time and questions in the powerpoint has detailed answers for explanation.

## What were the weaknesses?

## Comments

None
not sure
Lack of practice questions.
Couldn't think of any.
N/A
Hope that ppts can be released earlier that students who want to look at them earlier don't need to wait too long.

What did you most enjoy about it?

## Comments

One on one sessions with the instructor
Free time after completing my assignments
The labs were interesting and very informative.
Learning the content
Same as the lectures, the sections about coding.
Assignments created are interesting that helps me learn class materials better.

## Explanatory Note

## Percent Favourable Rating

This is the percentage of respondents who rated the instructor a 4 or 5 (Agree or Strongly Agree).

## Interpolated Median

The data collected for Student Evaluations of Teaching (SEoT) are ordinal in nature, with a natural order (from 1 to 5). While the mean may be used as a measure of central tendency for such data, it is not an appropriate or accurate representation of SEoT data (cf. Stark \& Freishtat, 2014). The usual measure of central tendency for ordinal data is the median. As a result, we have been reporting the mean and the median for the last several years. After considerable thought and data modeling, we now believe that the interpolated median is the best representation of the data, since it takes the frequency distribution into account.

Consider the following example from 2015W, the two classes have identical mean (3.8). However, the instructor in class 2 received $77 \%$ favourable (4-5) ratings, compared to $53 \%$ for the instructor in class 1. The Interpolated median values of (3.7 and 4.2), much better reflects the distribution of the scores above and below their respective median. Furthermore, the interpolated median is better correlated with percent favourable rating; such that an interpolated median of 3.5 on a Likert scale of 1 to 5 , corresponds to $50 \%$ favourable rating.

## Frequency Distribution

| Response for UMI | Class 1 | Class 2 |
| :--- | :---: | :---: |
| 5 = Strongly agree | 5 | 5 |
| 4 = Agree | 3 | 5 |
| 3 = Neither agree nor disagree | 6 | 0 |
| 2 = Disagree | 1 | 2 |
| 1 = Strongly disagree | 0 | 1 |
|  | 3.8 | 3.8 |
| Mean | 4.0 | 4.0 |
| Median | 3.7 | 4.2 |
| Interpolated Median | $53 \%$ | $77 \%$ |
| Percent favourable rating |  |  |

## Dispersion Index

The dispersion Index is a measure of variability suitable for ordinal data (Rampichini, Grilli \& Petrucci 2004). This dispersion index has values between zero and 1. A zero dispersion index indicates that all students in the section gave the same rating to the instructor. An index value of 1.0 is obtained when the class splits evenly between the two extreme values (Strongly Disagree \& Strongly Agree), a very rare occurrence. In SEoT data at UBC, the index rarely exceeds 0.85 , and mostly for evaluations not meeting the minimum recommended response rate.

