## Department of Medieval and Renaissance Studies

Survey of Current Undergraduate Students: 2013

The following outlines the results of a survey conducted between September $15^{\text {th }}$ and November 5th, 2012. A total of 48 current undergraduate students from the Department of Physics were invited to participate. A total of 20 students ( $42 \%$ of the invitees) completed the survey.

## A. Learning Outcomes

To what extent does your academic program contribute to developing your strength in the following:

1. Working effectively with others

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency |  |
| Very much | Valid Percent |  |
| Quite a bit | 8 | 40.0 |
|  | 9 | 45.0 |
| Sub-Total: | $\mathbf{8 5 . 0}$ | $\mathbf{3 . 2 0}$ |
| Some | 2 | 10.0 |
| Very litlle | 1 | 5.0 |
| Total | 20 | 100.0 |

## 2. Writing clearly and effectively

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 3 | 15.0 |
| Quite a bit | 3 | 15.0 |
|  | Sub-Total: | Mean: |
| Some | $\mathbf{3 0 . 0}$ | $\mathbf{2 . 4 0}$ |
| Very little | $\mathbf{1}$ | 65.0 |
| Total | 20 | 5.0 |

3. Speaking clearly and effectively

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency |  |
| Very much | 2 | Valid Percent |
| Quite a bit | Sub-Total: | 10.0 |
|  | 10 | 20.0 |
| Some | $\mathbf{4}$ | $\mathbf{3 0 . 0}$ |
| Very little | $\mathbf{2 . 2 0}$ |  |
| Total | 20 | 20.0 |

4. Thinking critically and analytically

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency | Valid Percent |
| Very much | 15 | 75.0 |
| Quite a bit | Sub-Total: | 20.0 |
|  | 1 | 95.0 |
| Some | 20 | 5.0 |
| Total |  | 100.0 |

Mean: 3.70

## 5. Solving complex real-world problems

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency | Valid Percent |
| Very much | 6 | 31.6 |
| Quite a bit | Sub-Total: | 52.6 |
|  | 3 | $\mathbf{8 4 . 2}$ |
| Some | 10 | 15.8 |
| Total | 19 | 100.0 |

Mean: 3.16

## 6. Having a broad spectrum of knowledge

|  |  |  |
| :--- | :--- | ---: |
|  | Frequency |  |
| Very much |  | Valid Percent |
| Quite a bit | 9 | 45.0 |
|  | Sub-Total: | 40.0 |
| Some | $\mathbf{3}$ | $\mathbf{8 5 . 0}$ |

## 7. Using research skills

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 11 | 55.0 |
| Quite a bit | 4 | 20.0 |
|  | Sub-Total: | $\mathbf{7 5 . 0}$ |
| Some | 5 | 25.0 |
| Total | 20 | 100.0 |

8. Applying problem solving skills

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 16 | 80.0 |
| Quite a bit | 3 | 15.0 |
|  | Sub-Total: | $\mathbf{9 5 . 0}$ |
| Some | 1 | 5.0 |
| Total | 20 | 100.0 |

9. Analyzing ideas, experiences, methods and data

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 13 | 65.0 |
| Quite a bit | 4 | 20.0 |
|  | Sub-Total: | $\mathbf{8 5 . 0}$ |
| Some | 3 | 15.0 |
| Total | 20 | 100.0 |

10. Synthesizing ideas, information or experiences into new understandings or methods

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 10 | 50.0 |
| Quite a bit | 8 | 40.0 |
|  | Sub-Total: | $\mathbf{9 0 . 0}$ |
| Some | 2 | 10.0 |
| Total | 20 | 100.0 |

Mean:
3.40
11. Evaluating points of views, decisions or information sources

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | $\mathbf{7}$ | 35.0 |
| Quite a bit | Sub-Total: | 30.0 |
|  | 5 | 65.0 |
| Some | 2 | 25.0 |
| Very little | 20 | 10.0 |
| Total | 200.0 |  |

12. Recognizing the limits to your knowledge

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Very much | 14 | 70.0 |
| Quite a bit | Sub-Total: | 10.0 |
|  | 4 | $\mathbf{8 0 . 0}$ |
| Some | 20.0 |  |
| Total | 20 | 100.0 |

## B. Program

Please indicate the extent to which you agree with the following statements:

1. Required courses are consistently available when I need to take them

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| Strongly agree | 9 | 45.0 |
| Agree | Sub-Total: | 30.0 |
|  | 2 | $\mathbf{7 5 . 0}$ |
| Unsure/Neutral | 3 | 10.0 |
| Disagree | 20 | 15.0 |
| Total |  | 100.0 |

Mean:
4.05

Mean:
3.40

## C. Teaching

Please indicate the proportion of courses in your program that exhibit the following characteristics:

1. Generally, grading is fair and well explained

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| All | 9 | 45.0 |
| Most | Sub-Total: | 50.0 |
|  | 1 | $\mathbf{9 5 . 0}$ |
| Some | 20 | 5.0 |
| Total | 100.0 |  |

Mean:
2. Questions and alternate viewpoints are encouraged

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| All | 7 | 35.0 |
| Most | 8 | 40.0 |
|  | Sub-Total: | $\mathbf{7 5 . 0}$ |
| Some | 5 | 25.0 |
| Total | 20 | 100.0 |

Mean:
3.10
3. Course instructors are readily available for consultation

|  | Frequency |  |
| :--- | ---: | ---: |
|  |  | Valid Percent |
| All | 16 | 80.0 |
| Most | 4 | 20.0 |
| Total | 20 | $\mathbf{1 0 0 . 0}$ |

4. Course instructors provide high quality teaching

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency |  |
| All | 10 | Valid Percent |
| Most | 8 | 50.0 |
|  | Sub-Total: | 40.0 |
| Some | 2 | 90.0 |
| Total | 20 | 10.0 |

5. Teaching Assistants provide high quality teaching

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| All | 8 | 40.0 |
| Most | 11 | 55.0 |
|  | Sub-Total: | $\mathbf{9 5 . 0}$ |
| Some | 1 | 5.0 |
| Total | 20 | 100.0 |

6. Course instructors create a climate that encourages learning

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| All | 8 | 40.0 |
| Most | Sub-Total: | 50.0 |
|  | 2 | 90.0 |
| Some | 20 | 10.0 |
| Total |  | 100.0 |

## 7. Course instructors encourage students to be independent learners

|  | Frequency |  |
| :--- | ---: | ---: |
|  | Valid Percent |  |
| All | 11 | 55.0 |
| Most | 6 | 30.0 |
|  | Sub-Total: | $\mathbf{8 5 . 0}$ |
| Some | 3 | 15.0 |
| Total | 20 | 100.0 |

Mean: 3.40

## D. Academic Advising

1. When you have needed advice about your program, have you been able to speak to someone associated with your program who could help you?

|  |  |  |
| :--- | ---: | ---: |
|  | Frequency | Valid Percent |
| Always | 13 | 72.2 |
| Usually | Sub-Total: | 22.2 |
|  | 1 | 94.4 |
| Rarely | Mean: | 3.67 |
| Total | 18 | 5.6 |

2. When you have obtained advice, how would you rate the quality of advising your received?

|  | Frequency |  |
| :--- | ---: | ---: |
| Excellent | 9 | Valid Percent |
| Good | 8 | 50.0 |
|  | Sub-Total: | 44.4 |
| Poor | 1 | 94.4 |
| Total | 18 | 5.6 |

Mean:
3.39

## D. Overall Evaluation

1. Based on your experiences, how would you describe the overall quality of your program?

| ar experiences, how would you describe the overall quality of your program? |
| :--- |
|  |
|  Frequency  <br> Excellent 9 Valid Percent <br> Good 10 45.0 <br>  Sub-Total: 50.0 <br> Fair 1 $\mathbf{9 5 . 0}$ <br> Total 20 5.0 |

## D. Overall Evaluation

## 2. What are some of the strengths of your program?

Broad spectrum of physics learned, and good facilities. Mostly good professors.
differential Equations Laser Optics
Due to my programs level of difficulty, one is forced to work hard and master the mathematics and physical intuition required to succeed.
Gain in problem solving skills, and understanding how the world works physically
Good instructors, small population so help is always available.
Interesting, challenging, thought provoking
It is a small community which encourages the sharing of knowledge and constant learning not just from the professors but other classmates.
Physics is awesome. Reedyk is awesome.
Small class sizes, comfortable learning environments, accessibility to professors and/or TAs for questions or concerns.
The people in the math department are true professionals.
The physics program's classes get much smaller from 1st to 4th year, so my professors know me by name and care about me. I think this is the main strength Brock has over bigger universities like McMaster.

The size, It's a small program, so professors can easily know each of the students individually, and when help or advice is needed, its given in such a way that best fits the student.

## 3. In what ways might the program be improved?

- facilities - TA for upper year courses - practice problems in addition to assignments to further skills - weekly office hours with Professor or TA

A better organization of course planning so you have the required math skills for the physics courses as well as finding a balance where the students are not overloaded with homework constantly.

A greater library to physics resources per course. I.e. resources to more examples of topics covered in class, for more exposure to concepts and examples taught in lectures.

If the lectures and lab sessions were better synchronized such that lab material would have already been covered in lecture prior to the lab

It can't be improved :)
It's pretty good how it is.
Later CLasses Shorter Classes More Explanation/examples
Make linear algebra MATH 2P12 available both first and second semester. Teach the students differential equations (ie. MATH 2P08) before teaching mechanics (ie. PHYS 2P20) as these tools taught in 2P08 are used frequently throughout 2P20.

More course offerings.
More courses offered, especially in the summer!
More emphasis on group work, where we would solve problems from the ground up using our intuition.

More selection for class times, allowing greater flexibility for scheduling electives
Phys 2 p20 should be taken after or at the same time as math 2 p 08 . Phys3p90 should be made available to 3rd year students by preventing conflicts with other courses that are required, such as Phys3p36.

The physics people need to do something with that horrendous website, and perhaps change that baby-barf green paint on the walls.
The program is awesome but, the labs are very confusing and tedious.

## 4. What have you learned from the faculty members and courses in your program that you consider to be particularly valuable/rewarding?

Everything that is taught I find to valuable to my growing knowledge and understanding of physics.
Follow what is close to your heart
Help is always available, organization is important
I learned how to become a harder and more independent worker.
Information, and skills.
Laboratory skills
MAtk Skills Problem Solving
Outside resources are (usually) essential for a complete, comprehensive, and interesting education.
Problem solving skills, lots of problem solving skills.

## 5. Do you have any further comments about your program?

As much as being a small program is good, its equally bad. Since we're a small program with few students, We don't have many professors, which means there is a limit to the number of courses we have available to us. A wider variety of advanced courses would go a long way towards helping students who are going on to graduate school, but to offer those we would need more professors since most of their time is currently occupied. More professors = more courses = happier graduating students.

Great
Love it, definitely do not regret enrolling at Brock. Just need to have people willing to tutor students in fourth year physics. Impossible to find anyone!
Overall very pleased
Program is awesome
The program is good overall, it seems relevant and the material is exciting.

