

Department of Physics

Survey of Undergraduate Alumni: 2013

The following outlines the results of a survey conducted between August 8th and November 5th, 2012. A total of 33 undergraduate alumni from the Department of Physics were invited to participate. A total of 10 students (30% of the invitees) completed the survey.

A. Learning Outcomes

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

1. Working effectively with others

	Frequency	Valid Percent
Very much	5	50.0
Quite a bit	1	10.0
	Sub-Total:	60.0
Some	3	30.0
Very little	1	10.0
Total	10	100.0

Mean:
3.00

2. Writing clearly and effectively

	Frequency	Valid Percent
Very much	4	40.0
Quite a bit	3	30.0
	Sub-Total:	70.0
Very little	3	30.0
Total	10	100.0

Mean:
2.80

3. Speaking clearly and effectively

	Frequency	Valid Percent
Very much	2	20.0
Quite a bit	5	50.0
	Sub-Total:	70.0
Some	1	10.0
Very little	2	20.0
Total	10	100.0

Mean:
2.70

4. Thinking critically and analytically

	Frequency	Valid Percent
Very much	10	100.0

Mean:
4.00

5. Solving complex real-world problems

	Frequency	Valid Percent
Very much	6	60.0
Quite a bit	3	30.0
	Sub-Total:	90.0
Some	1	10.0
Total	10	100.0

Mean:
3.50

6. Having a broad spectrum of knowledge

	Frequency	Valid Percent
Quite a bit	6	60.0
Very much	4	40.0

Mean:
3.40

Total	10	100.0
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7. Using research skills

	Frequency	Valid Percent
Very much	5	50.0
Quite a bit	2	20.0
	Sub-Total:	70.0
Some	3	30.0
Total	10	100.0

Mean:
3.20

8. Applying problem solving skills

	Frequency	Valid Percent
Very much	9	90.0
	Sub-Total:	90.0
Some	1	10.0
Total	10	100.0

Mean:
3.80

9. Analyzing ideas, experiences, methods and data

	Frequency	Valid Percent
Very much	6	60.0
Quite a bit	4	40.0
Total	10	100.0

Mean:
3.60

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

	Frequency	Valid Percent
Very much	7	70.0
Quite a bit	3	30.0
Total	10	100.0

Mean:
3.70

11. Evaluating a point of view, decisions, or information source

	Frequency	Valid Percent
Very much	7	70.0
	Sub-Total:	70.0
Some	1	10.0
Very little	2	20.0
Total	10	100.0

Mean:
3.20

12. Recognizing the limits to your knowledge

	Frequency	Valid Percent
Very much	6	60.0
Quite a bit	3	30.0
	Sub-Total:	90.0
Some	1	10.0
Total	10	100.0

Mean:
3.50

B. Program

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

1. Required courses were consistently available when I needed to take them

	Frequency	Valid Percent
Strongly agree	4	40.0
Agree	3	30.0
	Sub-Total:	70.0
Unsure/Neutral	2	20.0
Disagree	1	10.0
Total	10	100.0

Mean:
4.00

2. There was an adequate range of non-required/elective course offerings in my program every year

	Frequency	Valid Percent
Strongly agree	3	30.0
Agree	4	40.0
	Sub-Total:	70.0
Unsure/Neutral	2	20.0
Disagree	1	10.0
Total	10	100.0

Mean:
3.90

3. Library holdings and other library resources relating to my program were adequate

	Frequency	Valid Percent
Strongly agree	3	30.0
Agree	2	20.0
	Sub-Total:	50.0
Unsure/Neutral	4	40.0
Disagree	1	10.0
Total	10	100.0

Mean:
3.70

4. Teaching facilities and equipment used in my program were adequate

	Frequency	Valid Percent
Strongly agree	4	40.0
Agree	5	50.0
	Sub-Total:	90.0
Unsure/Neutral	1	10.0
Total	10	100.0

Mean:
4.30

5. The program met the expectations I had when I first enrolled in it

	Frequency	Valid Percent
Strongly agree	6	60.0
Agree	4	40.0
Total	10	100.0

Mean:
4.60

C. Teaching

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

1. Generally, grading was fair and well explained

	Frequency	Valid Percent
All	7	70.0
Most	3	30.0
Total	10	100.0

Mean:
3.70

2. Questions and alternate viewpoints were encouraged

	Frequency	Valid Percent
All	8	80.0
Most	2	20.0
Total	10	100.0

Mean:
3.80

3. Course instructors were readily available for consultation

	Frequency	Valid Percent
All	8	80.0
Most	2	20.0
Total	10	100.0

Mean:
3.80

4. Course instructors provided high quality teaching

	Frequency	Valid Percent
All	5	50.0
Most	5	50.0
Total	10	100.0

Mean:
3.50

5. Teaching Assistants provided high quality teaching

	Frequency	Valid Percent
All	2	20.0
Most	5	50.0
	Sub-Total:	70.0
Some	3	30.0
Total	10	100.0

Mean:
2.90

6. Course instructors created a climate that encouraged learning

	Frequency	Valid Percent
All	5	50.0
Most	5	50.0
Total	10	100.0

Mean:
3.50

7. Course instructors encouraged students to be independent learners

	Frequency	Valid Percent
All	5	50.0
Most	5	50.0
Total	10	100.0

Mean:
3.50

D. Academic Advising

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

	Frequency	Valid Percent
Always	7	87.5
Usually	1	12.5
Total	8	100.0

Mean:
3.88

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

	Frequency	Valid Percent
Excellent	6	75.0
Good	2	25.0
Total	8	100.0

Mean:
3.75

E. Co-op Education

1. Did you take the co-op program?

	Frequency	Valid Percent
Yes	2	20.0
No	8	80.0
Total	10	100.0

2. To what extent were your co-op work placements related to your program of study?

	Frequency	Valid Percent
Directly related	1	50.0
Somewhat related	1	50.0
Total	2	100.0

Mean:
2.50

3. How satisfied were you with your co-op program?

	Frequency	Valid Percent
Very satisfied	1	50.0
	Sub-Total:	50.0
Unsure/Neutral	1	50.0
Total	2	100.0

Mean:
4.00

4. Was the 0N90 workshop series helpful in preparing you for your job search and interviews?

	Frequency	Valid Percent
Somewhat	1	50.0
	Sub-Total:	50.0
Not at all	1	50.0
Total	2	100.0

Mean:
1.50

F. Overall Evaluation

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

	Frequency	Valid Percent
Excellent	8	80.0
Good	2	20.0
Total	10	100.0

Mean:
3.80

2. Would you recommend your program at Brock to others?

	Frequency	Valid Percent
Definitely	9	90.0
Probably	1	10.0
Total	10	100.0

Mean:
4.90

3. Were you well prepared to meet your career goals as a result of your education at Brock?

	Frequency	Valid Percent
Definitely	5	50.0
Probably	5	50.0
Total	10	100.0

Mean:
4.50

G. Life After Brock: Employment

1. What is your current employment status?

	Frequency	Valid Percent
Not employed	3	30.0
Employed in a part-time position	4	40.0
Employed in a full-time position	2	20.0
Self-employed	1	10.0
Total	10	100.0

2. If currently employed, to what extent does your job utilize the skills, abilities and knowledge that you gained from your program of study?

	Frequency	Valid Percent
To a great extent	4	57.1
To some extent	2	28.6
	Sub-Total:	85.7
Not very much	1	14.3
Total	7	100.0

Mean:
3.43

4. If you are not employed, what is the main reason?

	Frequency	Valid Percent
Enrolled in further education	4	100.0

Other: This is an ambiguous question. In grad school.

H. Life After Brock: Further Education

1. Since graduating from Brock, have you enrolled in a course study lasting more than six months?

	Frequency	Valid Percent
Yes	8	80.0
No	2	20.0
Total	10	100.0

2. Please indicate the major reason(s) for continuing formal studies (please indicate all that apply)

	Frequency	Valid Percent
To satisfy job/career requirements	1	12.5
To further pursue intellectual/academic development	7	87.5
Total	8	100.0

3. What degree/diploma/certificate are/were you pursuing?

	Frequency	Valid Percent
Bachelor's Degree	1	12.5
Teacher certification (BEd)	1	12.5
Masters/PhD degree	5	62.5
Other	1	12.5
Total	8	100.0

Other: Engineering

4. If you are/were enrolled in a graduate program, how well would you say that your program of studies prepared you for graduate studies?

	Frequency	Valid Percent
Extremely well	4	80.0
Well	1	20.0
Total	5	100.0

Mean:
2.80

F. Overall Evaluation

4. What were some of the strengths of your program?

- high quality professors - approachable professors - small class sizes

-small classes, tight-knit community, professors excited to teach and always willing to help.

Close knit department with friendly people. Profs have open door policy and always available.

Independent learning, small class size, supportive atmosphere

It's a small department so there was an ideal teacher to student ratio.

Small classes, great connection with professors

The faculty and staff was friendly, approachable, and accomidating. There were lots of great opportunities that you typically would not get at an undergraduate level.

The professors were always available to answer questions and/or offer advice. I was able to respond very well to most of the professors' teaching styles and material was well explained. Textbooks were very supportive in my learning.

5. In what ways might the program be improved?

-Having additional professors would allow for more variety with the courses so they can be offered annually as opposed to some which are offered bi-annually. Of course this is subject to the demand and enrollment.

Clean and organize the labs

Expand the number of courses offered.

No 8am Quantum Mechanics.

Offer more applied physics programs as opposed to just theory. This allows students to enter more engineering based careers as opposed to the usual 'high school teacher' or 'continue with research' routes. Also, instead of taking essentially two years of differential equations, require a math course in vector calculus so that EM isn't so difficult.

Physics and biophysics almost exclusively focused on condensed matter and molecular systems, with few offerings in Newtonian biomechanics or fluids.

There should be an astronomy course offered for physics majors.

6. What did you learn from the faculty members and courses in your program that you now consider to be particularly valuable/rewarding?

- a greater understanding of how the universe works - how to solve problems

-I learned a variety of analytical and computational skills which I have improved through my own research. -The faculty members provided me with the knowledge I need to develop stronger skills to pursue a career in academia.

Computer programming, electronics theory, physics

Everything they taught me.

I learned some strategies for teaching physics as well as different problem-solving strategies that I can model for my students. I also learned how to think critically and how to write a proper lab report (as well as model the format of a lab report). All of these things are useful to me as a high school physics teacher.

Problem solving skills, how to write and speak scientifically

7. Do you have any further comments about your program?

Clean and organize the labs!

I loved it and very much enjoyed my time taking Physics at Brock. Because the program was small, the faculty and students formed a close community, which provided many valuable experiences.

It was fun!

Thank you for the excellent education!

They had an amazing undergraduate program in physics. I think it is highly underrated.

G. Life After Brock: Employment

3. If employed, what is your current occupation?

- teacher and tutor

College instructor.

Currently, I'm an occasional teacher looking for a permanent position. Depending on the day and what I'm substituting for, I'm able to utilize the skills, abilities, and knowledge that I gained from my program to some extent. Once I get a permanent position I will use those skills, abilities, and knowledge to a great extent.

Jr. Electrical Engineer

supply teacher

Teacher