

# Teaching Dossier

---

## **Landon J. Getz**

Department of Microbiology and Immunology, Faculty of  
Medicine  
Dalhousie University

## Table of Contents

---

<b>Synopsis</b> .....	<b>1</b>
<b>Teaching Philosophy</b> .....	<b>1</b>
<b>Summary of Teaching Activities</b> .....	<b>1</b>
Historical Perspective and Current Context .....	1
Courses Taught.....	1
<b>Development of Teaching Materials</b> .....	<b>2</b>
<b>Service to Teaching</b> .....	<b>2</b>
<b>Efforts to Improve Teaching</b> .....	<b>3</b>
Workshops Attended.....	3
Workshops Facilitated.....	3
Participation in Peer Consultation.....	3
<b>Formal Feedback from Students</b> .....	<b>3</b>
Table 1: Formal Feedback from CHEM 1011/1012 (December 12 <sup>th</sup> /2018) ..	3
<b>Future Teaching Goals</b> .....	<b>4</b>

# Teaching Dossier

---

*Landon J. Getz, B.Sc. (Hons)*

Department of Microbiology and Immunology, Faculty of  
Medicine, Dalhousie University

## Synopsis

---

**As an educator, it is my job to ensure the learning and understanding of a diverse spectrum of students.** This document will, in summary, outline my work as an educator thus far, a personal teaching philosophy, and a summary of student evaluations and feedback. Please view this document through the lens of my personal teaching philosophy, as that philosophy guides my everyday actions in and out of the classroom.

## Teaching Philosophy

---

I consider it my duty to teach to the following personal philosophies: Students cannot succeed without a **safe, inclusive, and accessible learning environment**; and as an educator, I must **foster critical thinking and life-long learning strategies** to ensure students future success.

In fulfilling this duty, it is important to recognize that learning should not be a simple “nuts-and-bolts” transference of facts, but rather an engaging experience that ties learning outcomes to applicable examples. This is achieved through active learning techniques and constructive student feedback, as you will see throughout this document.

## Summary of Teaching Activities

---

### Historical Perspective and Current Context

As an Undergraduate student at Dalhousie University, I thought it essential to begin sharing my knowledge with other students through Teaching Assistantships. When I began my Doctoral studies at the same institution, I felt it important to further this by applying my experience towards an instructor position.

The courses I have taught previously, in exception of the Introductory Microbiology course, are outside my area of expertise, but were contained within my education as an undergraduate. Both courses, MICI 2100 and CHEM1011/1012, were built by others. My current instructorship with CHEM1011/1012 is a vital part of the team, containing roles as both a lecturer and provider of student support via e-mail and office hours.

### Courses Taught

#### INTRODUCTION TO CHEMISTRY 1 (CHEM1011/1021)

The electronic structures of atoms and molecules are used to explain the reactivity and properties of chemicals. Topics include atomic structure, bonding models, structure and shape of molecules and ions, and acid/base chemistry.

### **INTRODUCTION TO CHEMISTRY 2 (CHEM1012/1022)**

The principles of thermodynamics and kinetics are used to explain chemical reactivity and the principles of organic chemistry are used to develop an understanding of organic synthesis. Special topics include electrochemistry, spectroscopy, chirality, polymers, and the chemistry of living systems to illustrate the relevance of chemistry in everyday life.

### **IGEM WET-LAB BOOTCAMP**

During the international genetically engineered machine program, students are required to perform molecular biology experiments in the lab to test their project ideas and build DNA molecules for the competition. This wet-lab “bootcamp”, which I designed, built, and instructed, is a weekend long workshop designed to teach the students all the introductory molecular biology skills with hands-on in lab experience.

### **INTRODUCTORY MICROBIOLOGY (MICI2100)**

As a **teaching assistant** for the Introductory Microbiology class at Dalhousie University, it was my responsibility to mark exams, act as a student support via e-mail and in-person meetings during set office-hours, and be a point-of-contact for students.

### **MICROBIOLOGY HONOURS PROGRAM (MICI4900)**

Supervising an Honours student is a unique experience, which **combines both theoretical (lecture-based) learning and applied learning (bench/lab-work)**. The supervised student worked in the lab on a research question which was designed by me and the lab’s Primary Investigator. Supervision included explaining theory, demonstrating techniques, assigning pertinent reading, and assessing student’s level of understanding through informal and formal interactions.

## **Development of Teaching Materials**

---

As part of my role as both a **Part-Time Academic and Teaching Assistant** with CHEM1011/1012, I **organized and prepared other TA materials** to improve the TA’s teaching. This included the **introduction of Peer-Teaching at TA meetings**, along with professional development meetings that are mandatory for Lecture TA teaching support. Professional Development included presentations by the Centre for Learning and Teaching at Dalhousie University, informal discussions among TA’s at pre-determined meetings, and discussion on how to incorporate learning styles in the classroom.

Further, I have worked with Dr. Angela Crane (Course Coordinator for CHEM 1011/1012) to **incorporate LGBTQ+ positive atmospheres** into the course. This included the addition of pronouns to e-mail signatures and to Syllabi, as well as positioning **Pride flags in/around the Chemistry Resource Centre**. These are vital for the safe and inclusive environments that are required for students to be effective learners.

## **Service to Teaching**

---

### **Department of Microbiology and Immunology Undergraduate Studies Committee**

This committee is responsible for the curriculum and operation of the Microbiology and Immunology undergraduate Bachelor of Science degree program. My role on the committee is as Graduate Student Representative, relaying concerns about the undergraduate program from undergraduate and graduate students to the largely Faculty-composed committee. As an alumnus of the Microbiology and Immunology Undergraduate program, I am in a unique position to provide feedback to this Committee.

## Efforts to Improve Teaching

---

### Workshops Attended

#### Learning Styles Workshop

Centre for Learning and Teaching – Chemistry TA Professional Development Program.

### Workshops Facilitated

#### Chemistry Teaching Assistant Professional Development Workshops

Involved in developing and facilitating a CLT workshop session and more informal peer development around learning styles and effective peer teaching.

### Participation in Peer Consultation

#### Meetings with Dr. Angela Crane

Dr. Angela Crane (CHEM 1011/1012 Coordinator) has provided significant feedback in regard to my teaching and professional development. Through a variety of informal meetings, Dr. Crane has had a significant impact on my understanding of student assessment and a variety of learning styles.

#### Meetings with Dr. Jennifer MacDonald

Dr. Jennifer MacDonald (CHEM 1011/1012 Lab Coordinator) has provided informal feedback on my teaching style and, through informal discussion, provided insight into how students respond to particular questions or assignments. This feedback has influenced the way that I respond to student questions, and the level through which I can understand their frustrations and respond to them in an effective manner.

#### Professional Development Meetings with CHEM1011/1012 Lecture Support TAs

Informal meetings with Undergraduate and Graduate student Lecture Support Teaching Assistants has helped me empathize with student positions and given me a variety of new perspectives in regard to classroom experiences on the front-lines. In my experience, students of CHEM 1011 and CHEM 1012 are more likely to be open with peer TAs rather than instructors about course experience, and this information can be quite important in modelling teaching styles and course development.

## Formal Feedback from Students

---

**Table 1: Formal Feedback from CHEM 1011/1012 (December 12<sup>th</sup>/2018)**

**Key:** 1 = strongly disagree, 2 = moderately agree, 3 = neither agree nor disagree, 4 = moderately agree, 5 = strongly agree.

**Report prepared and evaluation facilitated by:** Dr. Angela Crane, First Year Chemistry Coordinator

Question	# of Responses	Mode	Median	Mean
The lecturer was well-prepared:	124	5	5	4.47
The lecturer was considerate of students	124	5	5	4.58
The lecturer was enthusiastic about the material	124	5	5	4.45
The lecturer was knowledgeable about the material	124	5	5	4.54
The lecturer was able to explain the materials well	123	5	5	4.31
The lecturer was a clear communicator	124	5	5	4.34
The lecturer was able to give constructive feedback	122	5	5	4.27
<b>The lecturer was overall, an effective teacher</b>	<b>124</b>	<b>5</b>	<b>5</b>	<b>4.41</b>

**Selected Student Comments from December 12<sup>th</sup>, 2018 Evaluation:  
[...] indicate sections edited for clarity)**

“He wants you to do well as he always answers questions carefully.”

“I find that Landon is very effective in teaching the material and help me get prepared for the exam with the review sessions.”

“[Landon] did very well, effectively explained his thought process and answered questions when they arose.”

“Sometimes his writing is unclear on the slides making it difficult to read. [He] does a very good job of explaining what he is doing for the students to understand.”

“Great instructor, it’s really easy to understand your explanations and answers to questions. [Landon] could be more assertive towards students who talk loudly in class. [He] would be a great professor!”

“Occasionally went over problems to quickly but would gladly go back and explain if students asked.

“Notes can be hard to follow at times [when drawn live]. It would be useful if you numbered the steps.”

**Response to Evaluation:**

Overall, these evaluations indicate to me that my approach to teaching is effective but has room for improvement. I will improve the organization of lecture slides and the delivery of these lectures. In particular it will be important that I work on the speed of my delivery and the clarity of the live, handwritten sections of the lecture slides that are done using a writing pen and tablet along with the lecture presentation. Alternatively, I can also consider removing the live, written sections as this seems to be a major area of confusion and concern for my students.

## **Future Teaching Goals**

---

I am proud to continue improving my teaching through continued student feedback, professional development workshops, and teaching experience. This will include enrollment in the Centre for Learning and Teaching’s Certificate in University Teaching and Learning (Graduate Students).

I am working with Dr. John Rohde on course development for a course titled, “Tiny Earth”. It combines lecture and lab techniques to generate data and publish it with the Tiny Earth initiative (more information at: <https://tinyearth.wisc.edu/>). The development of this course focuses heavily on active learning and was awarded an active learning grant through the 2018-19 active learning project funding.

Finally, Higher Education is a passion of mine, and I intend to pursue teaching throughout my life. As I combine my past experiences with the opportunities I will pursue in the future, I will be well positioned to do this.