

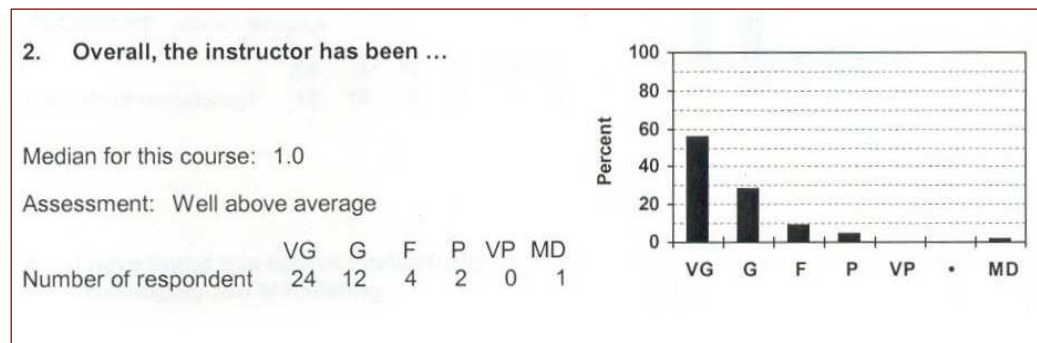
Teaching Statement:

Methodology

- I consider teaching is a complementary part of being a researcher, and I am committed to providing an excellent classroom experience for both undergraduate and graduate students.
- I believe in the way of teaching that is not just one-way transfer of knowledge. It should be interactive, explores the physical meanings behind the theories and includes every possible link between the studied material and reality of the industry.
- Class notes should be well organized and demonstrative. I used to incorporate multimedia clips in my presentations.
- Frequent assignments are important to assure continuous follow to the course topics.
- Course project for graduate students is a good opportunity to urge them to do some self-dependent research work and to practice academic reporting.
- Exams should be designed to measure different skills and to reflect the level of understanding of the main concepts of the studied material.
- I see that the undergraduate courses should be developed to offer wide spectrum of knowledge of small depth. The graduate courses should be more subject-oriented.
- Hands on and lab part of the educational process is very important for the students to get better understanding of the subject matter.
- Senior design projects are a good opportunities for undergraduate students to practice guided research and design work.
- It would always be a joy for me to teach students, to interact with them and to learn from them. They will always be the source of new passion and new ideas. It is them the future belongs to.



Celebration of ending the course (MECH6061/463), Concordia University, Montreal, Canada



Course Evaluations:

- Set of previous course evaluations are available upon request

Previous Academic Teaching Experience:

- **1986 - June 1996:** Lecturer in the department of Mechanical Power and Energy, Military Technical College, Cairo, Egypt. I contributed in teaching and tutoring of many core courses of the mechanical engineering department. Courses I had taught during this period were as follows: (Fluid Power Control, Fluid Mechanics, Hydrodynamics theory, Piston Engines, Automotive Engineering, Engineering Graphics, Machine Design)
- **June - July 1996:** Contributed in developing and teaching curriculum of a newly constructed Technical Education Community College at south of Egypt.
- **2000-2005:** During the Ph.D. study, part time faculty. After getting my Ph.D., Adjunct assistant Professor, Concordia University, Montreal, Canada. Courses I have taught during this period were as follows:
 1. Design and Analysis of Hydraulic Control Systems (MECH6061/463)
 2. Modeling and Analysis of Physical Systems. (MECH 370)
 3. Mechanics of Materials (ENGR 244)

Industrial Training & Professional Education to Industry Professionals

- Separate addendum is available upon request

Teaching Interests

Topic # 1 I wish to teach (All fluid power related courses).

- Fundamentals of Hydraulic Control
- Intermediate Hydraulics
- Design Concepts of Hydraulic Systems
- Electro-hydraulic Components and Systems
- Modeling and Simulation of Hydraulic Systems
- Fundamentals of Pneumatic Control
- Electro-pneumatic Components and Systems

Topic # 2 I wish to teach (System dynamics and control related topics)

- Physical System Modeling and Simulation
- Control Strategies for Dynamic Systems