



School of  
Biomedical  
Engineering

Engineering Technology Building  
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**BME 701 – Fall 2011**  
**Biomedical Engineering Core I**

**Course Objective:** An Introduction to biomedical engineering. The biological, chemical, electrical, and mechanical principles involved in the design and operation of medical devices and bioprocesses. The engineering research themes of the School of Biomedical Engineering are emphasized: mechanical engineering, biomedical imaging, bioinstrumentation, biomedical technology (e.g. biophotonics and medical robotics).

**Instructors:** Dr. Hubert deBruin (ETB 407, ext. 24171)  
Dr. Qiyin Fang (ETB 403, ext. 24227)  
Dr. Greg Wohl (ETB 409, ext. )  
Dr. Michael Noseworthy (ETB 406, 905-522-1155 ext. 35218)  
Dr. Alexandru Patriciu (ITB A308 ext. 20395)

**TA:** ETB 533

**Lecture Hours:** Tuesdays (Starting September 13<sup>th</sup>) 10:00 – 1:00 pm  
\*\*\*Presentation Days: December 13<sup>th</sup> and December 14<sup>th</sup>\*\*\*

**Lecture Room:**

**Assessment:** 5 quizzes (closed book – 30 minutes) 50 %  
(one quiz per segment, to be given at the start of class of the next segment)  
Project 50 %  
Oral PowerPoint presentation (12 min) followed by a Q and A session (8 min)

**Policy Reminder:**

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Officer or the Human Rights Consultant, as the problem occurs.

***McMaster University Statement on Academic Dishonesty***

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at:

[http://www.mcmaster.ca/senate/academic/ac\\_integrity.htm](http://www.mcmaster.ca/senate/academic/ac_integrity.htm)

**Lecture Schedule**

Dr. Hubert deBruin	3 weeks (Sept. 13, 20, 27)
Dr. Qiyin Fang	2 weeks (Oct. 4 <sup>th</sup> , 11 <sup>th</sup> )
Dr. Greg Wohl	2 weeks (Oct. 18 <sup>th</sup> , 25 <sup>th</sup> )
Dr. Michael Noseworthy	3 weeks (Nov. 1 <sup>st</sup> , 8 <sup>th</sup> , 15 <sup>th</sup> )
Dr. Alexandru Patriciu	2 weeks (Nov 22 <sup>nd</sup> , 29 <sup>th</sup> )

Friday December 9<sup>th</sup>                      Student presentations (full day)

The segments on photonics, imaging and robotics will include some exposure to research laboratories.