**76106 – Introduction to BioMEMS**

*Tuesdays, 14:00 to 15:45 pm*

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Office Hours: by appointment

**Syllabus**

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| 6-Mar-12 |  | Introduction to BioMEMS |
| 13-Mar-12 |  | Physics of microfluidics (dimensions, viscosity, Reynolds, laminar flow, surface tension) |
| 20-Mar-12 | Abroad | No class |
| 27-Mar-12 | Abroad | No class |
| 3-Apr-12 | Passover | Basics of PDMS soft lithography |
| 10-Apr-12 | Passover | No class |
| 17-Apr-12 | Abroad | Doron Gerber - Large scale integration (microvalves) |
| 24-Apr-12 | Yum Zicaron | No class |
| 1-May-12 |  | Flow encoded switching, Signaling dynamics |
| 8-May-12 |  | Human on a chip (lung, liver) |
| 15-May-12 |  | Micromechanical switching, Micropatterning |
| 22-May-12 | Conference | Danny Bavli - Surface chemistry |
| 29-May-12 |  | Fabrication Using Plastics |
| 5-Jun-12 |  | Projects Presentations |
| 12-Jun-12 |  | Project Presentations |
| 19-Jun-12 | Abroad | No class |

**Final Grade**

50% class participation, 50% final project