## Boston University, College of Engineering ENG EK 102: Introduction to Linear Algebra for Engineers

Course Information: Fall 2009

### Meeting Details:

Wednesdays 10am – noon MCS 148 111 Cummington Street

#### **Instructor:**

Professor Perkins

Office: 15 St. Mary's Street, Room 146

Phone: (617) 353–4991 Email: perkins@bu.edu FAX: (617) 353–5548

#### Course Website:

http://people.bu.edu/perkins/EK102

#### Office Hours:

Tuesday 1:30pm-3:30pm (email me to confirm) and by appointment

#### Textbook:

Gilbert Strang, Introduction to Linear Algebra (4<sup>th</sup> ed.), Wellesley-Cambridge Press, 2009

#### **Problem Sets:**

Problem sets will be 40% of course grade. Assigned approximately bi-weekly.

## Midterm Exam:

There will be a midterm exam worth 20% of course grade. Date to be determined (either 10/14 or 10/21).

#### Final Exam:

There will be a final exam worth 30% of course grade. Date to be determined by the College (maybe, 9-11am on Mon 12/21).

### Attendance and Participation:

Attendance/Participation in class will be 10% of course grade.

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## Course Syllabus: Fall 2009

Class 1:	Introduction	—Linear	Algebra	in	Engine	ering

Class 2: Vectors, Matrices, Systems of Equations

Class 3: Solving Linear Equations: Part 1

Class 4: Solving Linear Equations: Part 2

Class 5: Vector Spaces and Subspaces

Class 6: Orthogonality

Class 7: Midterm Exam

Class 8: Determinants

Class 9: Eigenvalues and Eigenvectors: Part 1

Class 10: Eigenvalues and Eigenvectors: Part 2

Class 11: Linear Transformations

Class 12: Numerical Methods and Applications