

Name: \_\_\_\_\_

## Student Survey

### 2.20 Marine Hydrodynamics, Fall 2011

Students taking 2.20 come from many different backgrounds, for this reason it is very helpful to us in teaching this course to know about your educational background and interests.

#### **1. Personal Info**

Name: \_\_\_\_\_ Nickname: \_\_\_\_\_  
Email: \_\_\_\_\_ Dept: \_\_\_\_\_ Year (U/G): \_\_\_\_\_

#### **2. Coursework Background**

Tell us how familiar you are with the following concepts. Indicate your familiar level with number (1: nothing or little; 2: OK; 3: very well):

##### **2.1 Math/ Calculus:**

Scalar ( )      Vector ( )      Tensor ( )      Einstein Notation ( )  
Taylor series expansion ( )      Leibnitz integral rule ( )  
Gradient ( )      Divergence ( )      Curl ( )      Laplace operator ( )  
Normal vector ( )      Integral along path ( )      Gauss Theorem ( )  
Polar coordinates ( )      Sphere coordinates ( )  
Ordinary Differential Equation ( )      Partial Differential Equation ( )

##### **2.2 Fluid Mechanics:**

Incompressible flow ( )      Material derivative ( )  
Continuity equation ( )      Navier-Stokes equation ( )  
Dimensional analysis ( )      Kelvin's Theorem ( )  
Control volume ( )      Source/Sink/Dipole ( )      Bernoulli equation ( )  
Lifting surface and Kutta condition ( )      Added mass ( )  
Flow separation ( )      Boundary layer ( )      Turbulent flow ( )  
Dispersion relation ( )      Wave energy ( )

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### **3. Learning Objectives**

Tell us your objectives for taking 2.20:

Read the 2.20 "Course Objectives" <http://web.mit.edu/2.20/www/objectives.htm>.

3.1 Which of the 2.20 "Course Objectives" are of special interest/ importance to you? Explain.

3.2 Do you believe you already meet certain of the 2.20 "Course Objectives/ Outcomes"? If so, which ones?

3.3 Are there additional subject outcomes you would like to gain from this particular class? Is there something more you would like to see in the course syllabus?

### **4. Recitation Sessions**

Indicate your preference (1, 2, 3) for the reserved recitation hours. Put an "X" if you are unable to attend.

Wednesday 1-2pm \_\_\_\_\_

Wednesday 4-5pm \_\_\_\_\_