TO: The Faculty of the College of Engineering

FROM: The School of Agricultural and Biological Engineering

RE: Change to Existing ABE 30700, Momentum Transfer in Food and Biological Systems pre-requisites.

The Faculty of the School of Agricultural and Biological Engineering have approved the following changes to an existing course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: ABE 30700 – Momentum Transfer in Food and Biological Systems
Sem Fall and Spring, Cr 3, Lecture 3
Requisites, Restrictions, and Attributes: ABE 20200 AND (MA 26500 AND MA 26600)

Fluid statics, Newton’s law of viscosity, shell momentum balances, equations of continuity and motion, one dimensional flow problems, flow through porous media, velocity distributions with more than one independent variable, two dimensional flow through a channel, stream function, velocity potential, dimensional analysis, boundary layer, turbulent flow, Reynolds stress, form and skin friction, application of macroscopic momentum and mechanical energy balances to engineering problems.

To: ABE 30700 – Momentum Transfer in Food and Biological Systems
Sem Fall and Spring, Cr 3, Lecture 3
Requisites, Restrictions, and Attributes: ABE 20200 AND [(MA 26200 AND Corequisite: MA 30300) OR (MA 26500 AND MA 26600)]

Fluid statics, Newton’s law of viscosity, shell momentum balances, equations of continuity and motion, one dimensional flow problems, flow through porous media, velocity distributions with more than one independent variable, two dimensional flow through a channel, stream function, velocity potential, dimensional analysis, boundary layer, turbulent flow, Reynolds stress, form and skin friction, application of macroscopic momentum and mechanical energy balances to engineering problems.

Reason: The addition of the MA 26200 prerequisite and MA 30300 corequisite is administrative to allow students on the existing and proposed plans of study to enroll in ABE 30700 without overrides.

Bernard A. Engel, Professor and Head
Agricultural and Biological Engineering Department