Electrical Engineering: Biomedical Applications of Electrical Engineering

EEBM 6373 (BMEN 6373) Anatomy and Human Physiology for Engineers (3 semester hours) This course provides an introduction to anatomy and human physiology for engineers and other non-life-scientists. Topics include nervous system, muscle and cardiac function, digestive system, and immune system. (3-0) Y

EEBM 6374 (BMEN 6374) Genes, Proteins and Cell Biology for Engineers (3 semester hours) This course provides an introduction to principles of modern molecular and cellular biology for engineers and other non-life scientists. Topics include genes, protein structure and function, organization of cells and cellular trafficking. (3-0) Y

EEBM 6376 (BMEN 6376) Lecture Course in Biomedical Applications of Electrical Engineering (3 semester hours) This course provides an introduction to different areas of biomedical applications of electrical engineering. A special emphasis will be placed on research topics that are actively pursued at UTD. (3-0) Y

EEBM 6380 (BMEN 6380) Introduction to Cellular Microscopy (3 semester hours) Image formation, diffraction, labeling techniques, fluorescence and image processing techniques will be introduced. (3-0) Y

EEBM 6381 (BMEN 6381) Advanced Concepts in Microscopy (3 semester hours) Continuation of EEBM 6380, with emphasis on advanced approaches such as vectorial diffraction, stochastic aspects of image formation and analysis. Prerequisites: EEBM 6380 or BMEN 6380 or by instructor permission. (3-0) Y

EEBM 7v87 Special Topics in Biomedical Applications of Electrical Engineering (1-6 semester hours) For letter grade credit only. (May be repeated to a maximum of 9 hours.) (1-6-0) R