

Wayne County Community College District

COURSE SYLLABUS

MAN 205 ADVANCED METROLOGY

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

In this course students will continue their study of dimensional metrology and utilize start-of the-art surfacing software in conjunction with point-to-point measuring tools and 3D scanning equipment.

PREREQUISITE: MAN 105

EXPECTED COMPETENCIES:

Upon successful completion of this course, the student will be able to:

- Demonstrate advanced knowledge of "PolyWorks" software
- · Perform "IM Inspect" and general report
- · Perform "IM Align" to gather point cloud data
- Demonstrate understanding of polygonal surfaces
- Demonstrate ability to repair and alter polygonal models
- Demonstrate ability to generate NURB surfaces
 Demonstrate understanding of reverse engineering process

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A 80%-89.9%= B 70%-79.9%= C 60%-69.9%= D <60% = E