East Carolina University
College of Technology and Computer Science
Department of Technology Systems

DESN 2036/7 Computer-Aided Design and Drafting
Course Syllabus

General Information:

Catalogue Description:	Application of computer-aided design and drafting (CADD) as related to design process and development of engineering drawings and other documents. Use of CADD in various design disciplines, including architectural, electrical, mechanical and civil. (3,0).
Prerequisites:	DESN 2034/5
Major Requirement:	DESN 2036/7 is a required course for the BS in Design.
Program Outcomes:	This course provides students with skills, knowledge, and experiences and as a result contributes to the achievement of the BS in Design program outcomes.

Texts:

Required Texts Include the following:

- *AutoCAD & Its Applications 2006* by Shumaker & Madsen, Goodheart-Wilcox. ISBN: 1-59070-606-4
- *Parametric Modeling with Autodesk Inventor 10* by Randy Shih, Schroff Development Corportion. ISBN: 1-58503-238-7

Supplemental References (recommended, but not required):
None

Course Objectives:

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

- Use of office practices for firms using CAD systems.
- Draw geometric shapes and constructions.
- Create drawing of different discipline on the CAD system.
- Dimension and annotate a drawing on the CAD system.
- Perform special editing operations that increase productivity.
- Create and manage symbol libraries.
- Create, plot, and print CAD drawings based on accepted industry standards and conventions
- Describe an overview of CAD and its applications.
- Demonstrate disk management including storage, copying, deleting, moving, and creation of files.

Computer and Software Programs:

The Department of Technology Systems requires that all students purchase a computer for use in their classes. A laptop is recommended and is required by some degree programs. You can go to the ACE departmental guidelines at http://author.ecu.edu/cs-itcs/act/ace/requirements.cfm to find out more about the required computer for your specific degree program. It is also advisable to contact your advisor or program coordinator as well.

Academic Integrity:

Academic honesty is a serious issue and students are expected to follow the University guidelines for academic honesty. All information included in assignments should be properly cited and referenced. Students are expected to avoid plagiarism and cite sources completely, including all electronic sources. The following web sites are provided for clarification on plagiarism and how to avoid it.

ECU's Writing Center, section on Plagiarism:
http://www.ecu.edu/cs-acad/writing/writingcenter/guides.cfm.

ECU Student Handbook, section III on Academic Integrity:
http://www.ecu.edu/studenthandbook/policies.htm

Topics Covered in this Course:

Week	AutoCAD Topics/Inventor Topics
Week 1	Introduction, Drawings and Templates
Week 2	Drawing & Editing
Week 3	Layers, Properties, Dimensioning/Fundamentals
Week 4	Drawing Basic Shapes
Week 5	Object Snap, Text, Dynamic Viewing/Constructive Solid Geometry
Week 6	…/Model History Tree
Week 7	Basic Editing/Parametric Constraints
Week 8	Editing Dimensions/Geometric Construction Tools
Week 9	Editing Dimensions/Geometric Construction Tools Continued
Week 10	Tolerancing, Tables/BORN Technique
Week 11	Sections, Blocks/Part Drawings
Week 12	Attributes/Symmetrical Features
Week 13	Polylines, Multilines/Assemble Modeling
Week 14	…/Automation

Disabilities:

East Carolina University seeks to comply fully with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a disability must be registered with the Department for Disability Support Services located in Slay 138. Contact number for Disability Services is 252.737.1016 (Voice/TTY).