

SolidWorks : Parts, Assemblies & Drawings

Course Outline

Course: Drafting 234 - SolidWorks: Parts and Assemblies

Instructor: Randy Kopf

phone: 269.965.3931 x2267

email: kopfr@kellogg.edu

web: <http://academic.kellogg.edu/kopfr>

Description: Previous CAD/Drafting experience recommended. This course is an introduction to the 3D modeler SolidWorks. The course will focus on parts, assemblies and drawings. Topics will include sketching in SolidWorks, creating relationships, parametric constraints, 3D tools, configurations, associative 2D part drawings, design tables, and assemblies.

Attendance Policy: Attendance will be taken on lecture and test days, and you will receive three (3) points for attending. If you are tardy (after lecture has begun) you will receive two (2) points. You will receive one grace absence for the semester.

Derivation of Grade: Drafting 234 is a project-based course and students will be required to complete each project successfully. If a submitted model/drawing is fully defined, dimensionally compliant, and follows proper technique it will receive 4 points. If it is deficient, it will be returned for revision and must be fixed. Return the marked up print after it has been revised with the re-submit date written on the print. **Do not hand in a new print.** A first revision will receive 3 points, second revision 2 **A half point will be deducted for models with incorrect orientation.** Assemblies with greater complexity will have increased value. In addition there will be periodic lab tests which must be performed without assistance during class. Your final grade will be based on points as follows (point totals are tentative):

275 pts Lab	A = > 93.3%	B- = 80.0 – 83.3%	D+ = 66.7 – 69.9%
100 pts Lab Tests	A- = 90.0 – 93.3%	C+ = 76.7 – 79.9%	D = 63.4 – 66.6%
45 pts Attend.	B+ = 86.7 – 89.9%	C = 73.4 – 76.6%	F = < 63.4
<u>420 pts Total</u>	B = 83.4 – 86.6%	C- = 70.0 – 73.3%	

Academic Honesty: All courses offered by the Computer-Aided Drafting and Design Department will be conducted with the highest standards of academic honesty. Each student is expected to support these standards by neither giving nor accepting assistance on quizzes, tests or exams, and by submitting only his or her own work for credit. Violations of these academic honesty standards will result in appropriate disciplinary action as spelled out in the student handbook. The incident will be documented and may be reported to the academic chair and/or program director for possible disciplinary actions up to and including course, program, or college expulsion.

Disclaimer: Information contained in this syllabus was to the best knowledge of the instructor considered correct and complete when distributed for use at the beginning of the semester. However, this syllabus should not be considered a contract with Kellogg Community College and any student, nor between the instructor and any student. The instructor reserves the right, acting within the policies and procedures of Kellogg Community College, to make changes in the course content or instructional techniques without notice or obligation.

Cell phones and pagers must be on mute during class. If you must take or return an emergency call, please do so out in the hallway.

Americans with Disabilities: Kellogg Community College does not discriminate in the admission or treatment of students on the basis of disability. KCC is committed to compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act.

Topic Outline

- The SolidWorks interface
- Sketch planes
- 2D sketching and constraints
- Creating geometric relationships
- Part modeling
- 3D operations
- Hole wizard and Simple holes
- Viewing, shading, zooms and pans
- Editing sketches and feature definitions
- Using the feature manager and rollback
- Part configurations and design tables
- Creating assemblies
- Exploded assemblies
- Part editing in assembly
- Weldments
- Creating 2D orthographic 3 view drawings
- Named views, sections, auxiliaries and assemblies
- PhotoWorks rendering