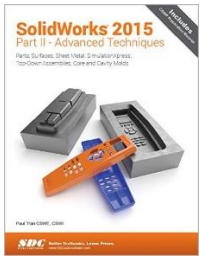
Three Rivers
COMMUNITY COLLEGE

Spring 2016 Syllabus
Solid Modeling II Lecture/Lab – MEC*K154/155
Room E116, Wednesdays 5:30 – 9:50 p.m.

Instructor:	Bob Shepherd
Contact Methods:	**Blackboard Learn Messaging (preferred)** *or* rshepherd@trcc.commnet.edu
Office Hours:	by Appointment
Online Discussions:	Available via Blackboard Learn

Required Textbook and Materials:



- **SolidWorks 2015 Part II – Advanced Modeling**
  Paul Tran CSWE, CSWI
  ISBN: 978-1-58503-928-9
- **Storage Media: Flash Drive**
- **Headphones or Earbuds to listen to tutorials** when needed

Course Description:

This course instills knowledge of advanced Solid Modeling techniques through the use of industry standard processes and programs. Solidworks 2015 will be the software platform. Most work required will be computer based. Topics of interest include 3D sketching, plane creation and various topics using advanced solid modeling and surfacing techniques. Simulations using Solidworks Finite Element Analysis (FEA) technology will also be explored.

Procedure: The course will consist of a lecture and a lab, consisting of assignments and a project. There will be periodic lectures and discussions of topics. The majority of class time will be tutorials using the textbook. This is a computer aided design course, therefore the best way to learn is to use the Solidworks software. Collaboration is encouraged, however the homework assignments should be the students own work.

Assignments: Assignments will be distributed on a weekly basis and should be submitted on or before the due date. Two percent (2%) will be deducted from grade per assignment for each day submitted late. The details for each assignment and the due date will be posted in Blackboard Learn and distributed in-class.

Lab Project & Presentation: To be determined in collaboration with instructor.

Grading Policy:

Course evaluation will be based on homework assignments and a project. Attendance will be taken and is also a part of your grade. Final grades will be based on a normal distribution of all students taking the course based on the following weighting:

- 30% Assignments
- 50% Project
- 20% Attendance & Participation

100% Total

Grades will be assigned according to the following scale:

94 -100	A
90 - 93	A -
87 - 89	B +
83 - 86	B
80 - 82	B -
77 - 79	C +
73 - 76	C
70 - 72	C -
67 - 69	D +
63 - 66	D
60 - 62	D -
Below 60	F

Class Participation and Discussion: Each student is expected to attend every class. This course is designed in such a way that a student should get more from the in-class activities than from the textbook alone. If you miss a class, you are responsible for obtaining notes, handouts and assignments. Course materials including syllabus, lectures, assignments and notes are located in Blackboard Learn. Attendance will be taken at each class meeting. If you cannot attend a lecture due to extraordinary events, notify the instructor in advance of the class you will miss. Unless special arrangements have been made with the instructor in advance, the due date for coursework will remain as indicated.

Online Communication: The primary method of online communication (between all students and the instructor) for this class will be **forums** in **discussion boards**. Any private communications (between one student and the instructor) should use the **Blackboard messaging** capability called **"Messages".** The Blackboard email tool will not be used in this class. Email outside of Blackboard should use my email address of: rshepherd@trcc.commnet.edu.

Digication: All students are required to maintain a learning portfolio in Digication that uses the (Three Rivers) College Template.

Classroom Policies: Use of **cell phones**, texting, surfing the Internet or playing computer games **are Not Permitted** during class! Language and behavior that is disrespectful, or disruptive, to others is unacceptable. Students should refer to their Student Handbook for examples of such behavior as well as additional school policies. Beverages are not permitted at your computer workstation.

Instructor Assistance: Seeking help from the instructor outside of class is encouraged if you are having difficulty understanding course material. You are encouraged to seek assistance during class as well as other times by appointment.

Course Withdrawal: A student who simply stops submitting work will receive the grade earned on that work, usually a failing grade. To receive a "W" grade instead, apply for a withdrawal through the registrar's office by May 9th. A "W" will be entered on the student transcript but will not be included in the calculation of the GPA.

Academic Integrity: Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to success in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; clearly document the sources of the material you use from others; and act at all times with honor.

Students with Disabilities: If you are a student with a disability and believe you will need support services and/or accommodations for this class, please contact the Disabilities Support Services at TRCC. Please note that the instructor cannot provide accommodations based upon disability until the instructor has received an accommodation letter from the Disabilities Counselor.

Solid Modeling II: Spring 2016 – MEC*K154/155– Course Outline				
Week #	**Date**	**Homework**	**Assignment Topics**	**Text Reading**
1	1/27/16		Introduction & Syllabus Review Chapter 1 – 3D Sketching	Chapter 1
2	2/3/16	Chap #1 Homework due	Chapter 2 – Plane Creation	Chapter 2
3	2/10/16	Chap #2 Homework due	Chapter 3 – Advanced Modeling	Chapter 3
4	2/17/16	Chap #3 Homework due	Chapter 4 – Sweep with Composite Curves	Chapter 4
5	2/24/16	Chap #4 Homework due	Chapter 5 – Advanced Modeling with Sweep & Loft	Chapter 5
6	3/2/16	Chap #5 Homework due	Chapter 6 – Loft vs. Sweep	Chapter 6
7	3/9/16	Chap #6 Homework due	Chapter 7 – Loft with Guide Curves	Chapter 7
8	3/16/16	Chap #7 Homework due	Chapter 8 – Advanced Modeling - Surfaces	Chapter 8
9	3/30/16	Chap #8 Homework due	Chapter 9 – Advanced Surfaces	Chapter 9
10	4/6/16	Chap #9 Homework due	Chapter 10 – Filled Surfaces **Project Subject Due** *(Project Plan)*	Chapter 10
11	4/13/16	Chap #10 Homework due	Chapter 11- Surfaces vs. Solid Modeling	Chapter 11
12	4/20/16	Chap #11 Homework due	Chapter 12 – Simulations (FEA)	Chapter 12
13	4/27/16	Chap #12 Homework due	Weldments – Structural Members - *Tentative*	Chapter 16
14	5/4/16		Open Lab	
15	5/11/16		Projects Due	