**STIRLING ENGINE ASSEMBLY PROJECT NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SECT: \_\_\_\_\_**

**Assemble the Stirling Engine from the zipped part files on the course webpage.  This will be worth 16 points related to the following deliverables: (A) Work-in-progress day 2 check, (B) assembly model and renderings, (C) assembly and sub-assembly drawings, and (D) part drawing/animation. Part A is scored based on an in-class check on day two of the project. The remaining parts B-D will be turned in together on the assignment due date with this partially-graded cover page.**

**A. Work-in-Progress items ready to demonstrate at start of class on 3/22 (to be checked and initialed by a mentor or instructor)** none (0) partial (1/2) complete (1)

Part A Sub-Score:

 /4

Initial: \_\_\_\_\_\_

1. Files stored on the course shared drive in a

personal folder (under your name) \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

1. Acceptable file naming (sub-asms 1&2) \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_
2. Use of 4 sub-assembly models \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_
3. Main assembly composed from sub-asms \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

**B. Assembly Model/Rendering Checklist

\_\_\_ consists of 4 sub-assemblies (base, flywheel, displacement piston, power piston) as given in zipped parts file

\_\_\_ thoughtful selection of part numbers within the 4 sub-assemblies (namely sub-asms 1&2 that you renamed)

\_\_\_ summary of assembly modeling scheme/process (w/ illustrative screenshots and descriptive captions)

\_\_\_ accurate replication of Stirling Engine through proper mating of parts

\_\_\_ attractive renderings (in color)

\_\_\_ lessons learned about assembly modeling**

Part B Sub-Score:

 /4

**C. Assembly and Sub-Assembly Drawings Checklist**

\_\_\_ uses ME drawing template correctly (w/ completed and dynamically-linked title block)

\_\_\_ effectively uses exploded views

\_\_\_ accurate main assembly drawing (w/ proper referencing of sub-assemblies by number in BOM)

\_\_\_ accurate sub-assembly drawings (w/ proper referencing of parts by number in BOM)

\_\_\_ checked by and signed in title block by peer

\_\_\_ lessons learned about creating assembly drawings

Part C Sub-Score:

 /4

**D. Part Drawing & Animation Checklist**

\_\_\_ shop ready drawing of Bearing Plate (part in Flywheel sub-assembly) that uses best practices

\_\_\_ lessons learned about creating shop ready part drawings

\_\_\_ video saved in windows media player format and stored in personal folder on shared drive

\_\_\_ employs at least two independent motions

\_\_\_ gives insight about normal operation

\_\_\_ lessons learned about animation

Part D Sub-Score:

 /4