

## ENGR 213 Strength of Materials – Quiz #5

Watch first 50 minutes (link below) and answer the following questions. Please upload your \*.docx or \*.pdf file to the Assignments section of D2L. This Quiz #5 is due on Wednesday, May 20<sup>th</sup> at 11:30 pm.

### [Chinese Rainbow Bridge](#)

- 1) Who invented suspension bridges and when?
- 2) What were the 'arteries' of the Song empire?
- 3) What material are Rainbow Bridges built from?
- 4) What 2 types of bridges could the Rainbow Bridge be?
- 5) What did Da Vinci say about an arch bridge?
- 6) What is the potential problem of the missing L-shape block? Which type of stress of the 6 we have studied would this be failure due to?
- 7) What are shear legs used for?
- 8) What type of material was used for lashing?
- 9) Why do stone beams give no warning when they are about to fail?
- 10) What is Bashar worried about with the 'red' wooden members?
- 11) What is used as a large point load to test the bridge?
- 12) Does Bashar think the beams are in bending after bridge completion?