We will divide 6 students into three groups. Each group rotates every 90 minutes.

The Surgical procedures will change according to time, because you can only take out the gallbladder once!

I recommend that for each procedure there is one person who is the "surgeon" with 1 assistant, that rotate so that everyone gets a chance.

1. Open Surgery

- a. 1030-1200
 - i. Laparotomy incision
 - ii. Anatomy, demonstrate differences with human such as spleen, position of bowel
 - iii. Cholecystectomy
 - iv. Small bowel resection, hand sutured
- b. 1300-1430
 - i. Anatomy, demonstrate differences with human such as spleen, position of bowel
 - ii. Splenectomy
 - iii. Nephrectomy
- c. 1430-1600
 - i. Anatomy, demonstrate differences with human such as spleen, position of bowel
 - ii. Dissect out the IVC, ligate IVC
 - iii. Median sternotomy
 - iv. Cardiac stab wound

2. Laparoscopy

- a. 1030-1200
 - i. Instruments and Ports teaching
 - ii. Place ports, insufflation
 - iii. Cholecystectomy
- b. 1300-1430
 - i. Instruments and Ports teaching
 - ii. Replace ports and re-insufflate the abdomen
 - iii. Biopsy edge of liver with stapler or bovie
 - iv. Attempt small bowel stapling without anastomosis
 - v. Attempt spleen stapling
- c. 1430-1600
 - i. Instruments and Ports teaching
 - ii. Replace ports and re-insufflate the abdomen
 - iii. Biopsy edge of liver with stapler or bovie
 - iv. Attempt small bowel stapling without anastomosis
 - v. Attempt spleen stapling

- 3. Ex Vivo Tissue (All groups same)- If there is more time, have them repeat the gastric closure and bowel anastomosis. Try 1-layer and 2-layer closures. Get comfortable with the instruments.
 - a. 1030-1200
 - i. Aorta suture
 - ii. Gastric closure
 - iii. Gastro-jejunostomy
 - iv. Micro-surgery
 - b. 1300-1430
 - c. 1430-1600