Equipment/Supplies Required or Acceptable for FLS Skills Testing

Materials only suitable for skills training or practice are noted as such

Standardized FLS Supplies*
- FLS trainer box system with all provided cables and attachments
- Peg transfer board (with 6 colored rubber objects)
- Jumbo clip with Velcro
- Single circle pre-stamped gauze sheets (double circle is suitable for practice only)
- Red foam organs
- Red/White Velcro suture block
- Penrose drains

Replacement -arts and accessories for FLS trainer box system are available at www.fls-products.com

Additional Required Equipment/Supplies **
- Video monitor for use with the FLS trainer, minimum size 15” (must have composite/RCA video input)***
- 2 Trocars/ports (at least 10mm, should be ‘low-profile’)
- 2 Maryland Dissectors
- Endoscissors or Endoshears (sharp!)
- Grasper with a locking handle/locking grasper
- 2 Laparoscopic needle drivers (cannot be self righting)
- 1 Open-ended knot pusher
- 1 Closed-ended knot pusher
- Ligating loops/Endoloops (any material acceptable)
- 2-0 silk or sofisilk suture at least 90cm in length, taper SH or V-20 curved 26mm needle (see helpful product information below)

Other Useful Materials/Equipment
- Height-adjustable tables
- Step stools
- A/V cart or wall mount for monitor
- Power strips/extension cords
- Sharps box
- Stopwatch
- Metric ruler
- Additional tables/carts for instruments

*The standardized FLS supplies can only be purchased from Limbs & Things, Inc., (LTI). Comparable products from other manufacturers are NOT ACCEPTABLE for use in the FLS exam. Visit www.fls-products.com for ordering information.

**Equipment listed here can be obtained from several different manufacturers/suppliers. See Helpful Product Information below for examples.

***Almost all televisions (old and flat screen) have a composite or RCA video input (yellow, round). Some Stryker monitors have only a SVideo input and in this case, you would need to purchase an S- video to RCA adapter (Radio Shack carries these). We do not recommend trying to use a computer monitor (unless it already has an RCA video input) as you will need to purchase a signal converting box (can be expensive and also very hard to find) and even then the picture is not ideal due to the fact that the signal is being converted from analog to digital and some quality is compromised.
Helpful Industry Product Information

Listed below are a few examples of acceptable products/equipment. Please do not construe as official endorsements or anything other than suggestions

**Needle Drivers**
(Self-righting needle drivers are NOT acceptable for use during the FLS exam)
- LTI Laparoscopic Needle Driver (Left) Part#: 50385
- LTI Laparoscopic Needle Driver (Right) Part#: 50384
- Ethicon needle driver E 705R
- Storz KOH Macro Needle Driver/Holder ergo pistol #26173 KM
- Storz KOH Macro Needle Driver/Holder ergo pistol #26173 MC
- Storz KOH Macro Needle Driver/Holder #26173 MR and ML
- Olympus needle driver A5690

**Maryland Dissectors**
- LTI Maryland Dissector Part#: 50381
- Ethicon Endopath Curved Dissector 5DCD
- Storz Kelly/Maryland grasper, complete instrument #33121, 33300, 33310ML
- Covidien Endo Dissect 5mm REF 176645

**Grasper w/ Locking Handle**
- LTI Grasper (Locking Handle) Part#: 50382
- Ethicon Endopath Grasper 5DSG
- Covidien Endo Grasp 5mm #173030

**Endoscopic Scissors**
- LTI Endoscissors Part#: 50383
- Ethicon Endopath 5 mm Scissors 5DCS
- Storz Endoscopic Scissors, complete instrument with two inserts #33121, 33300, 33310
- Covidien Endo Shears 5mm REF 176643

**Knot Pusher**
(Both open and closed knot pushers are acceptable)
- LTI Open- and Closed-ended Knot Pusher Part#: 50386
- Cook Medical Clarke-Reich Laparoscopic Knot Pusher (product # G16681) Order # J-CRKP-042900
- Covidien Endo Slide #174510 (open knot pusher)
- Storz open and closed knot pusher 26596D
- Storz open knot pusher 26596 SK

**Suture**
- LTI Suture 2-0 (25pcs) Part 50368
- LTI Suture 2-0 (50pcs) Part 50367

Currently Ethicon, Inc. does not stock a suture long enough for the extracorporeal knot task. However, a special order can be made through Ethicon for suture appropriate for use in the FLS exam. The product code for the special order suture is D8342. The specifications are: 2-0 silk black braided, 48” (122cm), SH 26 mm 1/2 circle taper needle.

SAGES
www.flsprogram.org
Trocars
LTI Trocars (pair) Part#: 50330
Ethicon-Endo Xcel 11mm bladeless trocar B11LPH
Ethicon-Endo Xcel 12 mm bladeless trocar B12LT
Covidien Thoraport 11.5mm REF 179303

Ligating Loops/Endoloops
LTI Medical Single-Use Ligating loop product Part#: 50364 *(single-use acceptable for testing)*
LTI Medical Ligating Loop (multi-use) product Part#: 50365 *(multi-use acceptable for practice only)*
Ethicon Endoloop Coated vicryl 0 violet braided EJ10C (box) EJ10 (individual)
Ethicon Endoloop vicryl 0 EJ10G (box)
Ethicon Endoloop PDS II 0 EZ10G (box) EZ10 (individual)
Ethicon Endoloop PDS II ligature EZ10C (box)
Covidien (Autosuture) Surgitie 2-0 polysorb REF EL-21-L (individual) ED- 20-L (box)
Covidien (Autosuture)Surgitie 0 18” chromic gut REF SGL-1

Monitor
LTI Medical 19” video screen product Part#: 50321
Stryker and Sony endoscopy monitors work very well with the FLS Trainer box
Most color standard or HD televisions (at least 15” screen) with an RCA or composite video input should work

Sharps Container
Most standard sharps containers are fine

Height Adjustable Tables
LTI Mobile SimCart for FLS Trainer System Part#: 50322

Instrument Kit
LTI FLS Approved Instrument Kit Part#: 50380 *(FLS Approved Non--Clinical/Not Sterilized)*
- 2 LTI Maryland Dissectors
- 1 LTI Endoscissors
- 1 LTI Grasper (Locking Handle)
- 1 LTI Laparoscopic Needle driver (Right)
- 1 LTI Laparoscopic Needle driver (Left)
- 1 LTI Open- and Closed- ended Knot Pusher

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