Fiber Optics Installer (FOI)
Classroom Equipment List Requirements

CLASSROOM (Student to Instructor Ratio 12:1)

1. Manuals/Textbooks (12)
2. Workbooks (12)
3. Support and resource materials (Cable/Connector Boards)
4. PowerPoint, CDs and/or Video Presentation Materials
6. Examinations and paperwork documentation

LABORATORY SETUP

Test Equipment:

1. OTDR Multimode (850/1300 nm) (1)
2. OTDR Fiber Launch Cord, Multimode, 62.5 µm (100 meters) (2)
3. Fusion Splicer (1)
4. Digital Multimeter (1)
5. Fiber Optic Light Source (1)
6. Fiber Optic Meter (1)
7. Optical Loss Test Set (OLTS) (1)[i]
8. Measurement Quality Jumper, 1 meter, MM, ST-ST (2)
9. Measurement Quality Jumper, 1 meter, ST-SC (2)[ii]
10. Measurement Quality Jumper, 1 meter, ST-LC (2)[iii]
11. Mandrel, 62.5 µm, 3 mm jacket (1)
12. 400x Fiber Optic Video Inspection System (1)
13. 400x Fiber Optic Inspection Microscope (6)
14. Fiber Continuity Tester (1)
15. Visual Fault Locator (VFL) (1)

Hardware/Hand Tools:

(Minimum quantity 6 each – 1 for every two students) *Unless otherwise listed

1. Fiber Scribe
2. ST Polish Disc[iv]
3. SC Polish Disc[v]
4. LC Polish Disc[vi]
5. Polish Glass Plate w/ Rubber Pad
6. Fiber Mat
7. No-Nik
8. Hot Melt Oven (2)[vii]
9. Hot Melt Cooling Stand (2)[viii]
10. Hot Melt Connector Holder (24)[ix]
11. ST Cure Adapter (12)[x]
12. Mechanical Splice Assembly Tool
13. Cleaver
14. Kevlar Shears
15. Fiber Optic Stripper
16. ST Mating Sleeve
17. SC-ST Mating Sleeve[xi]
18. LC-ST Mating Sleeve[xii]
19. Fiber Disposal Container
20. Alcohol Dispenser
21. 2-Part Epoxy Connector Oven (2)
22. ST Curing Block (1)[xiii]
23. SC Curing Block (1)[xiv]
24. LC Curing Block (1)[xv]
25. Safety Glasses (12)
26. Crimp Tool w/Dies (ST/SC/LC)[xvi]
27. Tweezers
28. No Epoxy/No Polish Toolkit[xvii]
29. Oven Timers[xviii]

Consumables:

1. 3M Hot Melt® Connectors MM[xix]
2. ST Connectors MM[xx]
3. SC Connectors MM[xxi]
4. LC Connectors MM[xxii]
5. No Epoxy/No Polish Connectors MM[xxiii]
6. Crimplock Splice
7. 2-Part Epoxy Packs[xxiv]
8. Anaerobic Adhesive Hardener[xxv]
9. Anaerobic Adhesive Primer[xxvi]
10. Empty Syringe w/1.2 mm Needle[xxvii]
11. Applicator Needle Tips 1.2mm
12. Optical Fiber 62.5/125 µm 3.0 mm Simplex Multimode (305 meters)
13. Flexible Piano Wire
14. Isopropyl Alcohol and/or Fiber Optic Cleaning Solution
15. Fiber Optic Wipes
16. Fusion Sleeves
17. 9 Volt Batteries
18. AA Batteries
19. AAA Batteries
20. Connector Cleaner Reels
21. Canned Air
22. Fiber Optic Polishing Film 5 µm
23. Fiber Optic Polishing Film 1 µm
24. Fiber Optic Polishing Film .1 µm
25. Fine point permanent (Sharpie®) Markers
26. Masking/Painters Tape

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Cable Samples for Skill Testing Identification:

1. Fan-out Kit
2. Breakout Kit
3. Armored Cable
4. Breakout Cable
5. Distribution Cable
6. Loose Tube Cable
7. Ribbon Cable
8. Single-mode Cordage
9. Multimode Cordage
10. LC Connector
11. MPO or MTP® Connector
12. MTRJ Connector
13. SC Connector
14. ST Connector

Notes:

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[i] If using a Digital Multimeter with Fiber Optic Light Source and Fiber Optic Meter, the Optical Loss Test Set (OLTS) is not required
[ii] Not required if just assembling patch cords using ST and/or LC connectors
[iii] Not required if just assembling patch cords using SC and/or ST connectors
[iv] Not required if just assembling patch cords using SC and/or LC connectors
[v] Not required if just assembling patch cords using ST and/or LC connectors
[vi] Not required if just assembling patch cords using ST and/or SC connectors
[vii] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[viii] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[ix] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[x] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[xi] Not required if just assembling patch cords using ST and/or LC connectors
[xii] Not required if just assembling patch cords using ST and/or SC connectors
[xiii] Not required if just assembling patch cords using SC and/or LC connectors or using anaerobic epoxy and no epoxy/no polish connectors
[xiv] Not required if just assembling patch cords using ST and/or LC connectors or using anaerobic epoxy and no epoxy/no polish connectors
[xv] Not required if just assembling patch cords using ST and/or SC connectors or using anaerobic epoxy and no epoxy/no polish connectors
[xvi] Choose the appropriate crimper style based on your choice of connector
[xvii] Not required if just assembling patch cords using connectors or using anaerobic epoxy and oven-cured epoxy
[xviii] Not required if just assembling patch cords using anaerobic epoxy and no epoxy/no polish connectors
[xix] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[xx] Not required if just assembling patch cords using SC and/or LC connectors
[xxi] Not required if just assembling patch cords using ST and/or LC connectors
[xxii] Not required if just assembling patch cords using ST and/or SC connectors
[xxiii] Not required if just assembling patch cords using connectors or using anaerobic epoxy and oven-cured epoxy
[xxiv] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors
[xxv] Not required if just assembling patch cords using connectors or using oven cured 2-part epoxy and Hot Melt
[xxvi] Not required if just assembling patch cords using connectors or using oven cured 2-part epoxy and Hot Melt
[xxvii] Not required if assembling using anaerobic epoxy and no epoxy/no polish connectors

