Telecommunications System Installer
CSIR 1303.6A1 – Spring 2023

INSTRUCTOR CONTACT INFORMATION
Instructor: Tim Storbeck
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Office Phone: 409-247-5236
Office Location: T4 Rm 109D
Office Hours: Monday/Wednesday 7:00-8:00 am, 2:30-4:30 pm
Tuesday/Thursday 7:00-8:00 am, 10:30 – 11:00 am, 1:30 – 4:30 pm
Friday 7:00-8:00 am

CREDIT
3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION
Face-to-face

PREREQUISITE/CO-REQUISITE:
None

COURSE DESCRIPTION
This course reviews fundamentals of telecommunications media, including terminology, rules and regulations, safety procedures, industry standards and protocols, installation, connectorization, maintenance, and troubleshooting. General principles of customer service within a technical environment are also studied. The competencies acquired are summarized in a comprehensive project covering network, telephone and coaxial wiring, fiber optics cables, satellite television systems, structural wiring, and "smart house" concepts.

COURSE OBJECTIVES
Upon completion of this course, the student will be able to
• Read and interpret blueprints to determine wiring requirements
• Identify telecommunications system components
• Identify and describe industry standards and protocols
• Describe safety procedures
• Select proper tools
• Connectorize telecommunications media
• Install, maintain, and troubleshoot telecommunications media
• Discuss internal/external customer relationships
• Communicate technical information to customers in a clear, precise and logical manner
• Update customers on work progress to maintain customer satisfaction and public relations
REQUIRED TEXTBOOK AND MATERIALS

- **CABLING** The complete guide to Copper and Fiber-Optic Networking
  - Computer with Internet Access

ATTENDANCE POLICY

Attendance is mandatory. Students are expected to attend class regularly. Attendance counts for 10% of your grade.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings (Due on Week)</th>
<th>Assignments (Due on Week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction</td>
<td>Syllabus</td>
<td>Book at a glance</td>
</tr>
<tr>
<td>2</td>
<td>Part I LAN Network an Cabling Systems</td>
<td>Ch 1,2, &amp;3</td>
<td>Learning Standards</td>
</tr>
<tr>
<td>3</td>
<td>Choosing the right cable</td>
<td>Ch 4 &amp; 5</td>
<td>Labs Terminating cables</td>
</tr>
<tr>
<td>4</td>
<td>Tools of the Trade</td>
<td>Ch 6,7, &amp;8</td>
<td>Labs working with the tools</td>
</tr>
<tr>
<td>5</td>
<td>Copper or Fiber</td>
<td>Ch 7 &amp; 8</td>
<td>Labs Testing speed</td>
</tr>
<tr>
<td>6</td>
<td>Termination, Wall Plates and connectors</td>
<td>Ch 9 &amp; 10</td>
<td>Labs installing plates and Connectors</td>
</tr>
<tr>
<td>7</td>
<td>Network Equipment</td>
<td>Ch 11</td>
<td>Labs installing racks and wire trays</td>
</tr>
<tr>
<td>8</td>
<td>Wireless Networks</td>
<td>Ch12</td>
<td>Labs building a mesh wireless network</td>
</tr>
<tr>
<td>9</td>
<td>Creating a request for proposal &amp; Work experience from the field</td>
<td>Ch 13, 16, &amp; 17</td>
<td>Labs Filling out paperwork correctly</td>
</tr>
<tr>
<td>10</td>
<td>History of Fiber Optics</td>
<td>Ch 18 &amp; 19</td>
<td>Working w/ laser and LED</td>
</tr>
<tr>
<td>Week</td>
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<td>Assignments (Due on Week)</td>
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<tr>
<td>11</td>
<td>Principles of light</td>
<td>Ch 20</td>
<td>Working w/ Laser and LED</td>
</tr>
<tr>
<td>12</td>
<td>Types of Fiber cable</td>
<td>Ch 21, 22, &amp; 23</td>
<td>Labs research availability of Fiber cable</td>
</tr>
<tr>
<td>13</td>
<td>Connectors and splicing Fiber</td>
<td>Ch 24 &amp; 25</td>
<td>Labs Splicing and terminating</td>
</tr>
<tr>
<td>14</td>
<td>Fiber Multiplexer and Equipment</td>
<td>Ch 28, 29, &amp; 30</td>
<td>Fiber optic detectors and Receivers.</td>
</tr>
<tr>
<td>15</td>
<td>Review</td>
<td>Finish any labs not finished</td>
<td>Last chance for Hands on Lab make up.</td>
</tr>
<tr>
<td>16</td>
<td>Final</td>
<td>Last chance to turn in late work</td>
<td>Final</td>
</tr>
</tbody>
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**COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

- Chapter Quiz or Test 40%
- Attendance 10%
- Labs 30%
- Final Exam 20%

**GRADE SCALE**

- 90-100  A
- 80-89  B
- 70-79  C
- 60-69  D
- 0-59  F

LIT does not use +/- grading scales

**ACADEMIC DISHONESTY**

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution’s Academic Dishonesty Policy available in the Student Catalog & Handbook, accessible on the LIT website.

**TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at Online Learning Requirements. A functional broadband internet connection, such as DSL, cable, or Wi-Fi is necessary to maximize the use of online technology and resources.
DISABILITIES STATEMENT
The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles’ Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT
It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

STARFISH
LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION
• Certification: If a student passes the certification test that is associated with this class, you will receive an ‘A’ on the final exam and credit for 25% of your labs. If you have missed a previous test, you must still take the final exam to substitute for that grade.
• Course Grade Requirement: A grade of ‘C’ or better must be earned in this course for credit toward degree requirement.

CERTIFICATION REQUIREMENT
Cyber Security and Networking majors are required to earn a certification in at least one of the following areas prior to graduation.
• A+ Certification
• Network+ Certification
• Security+ Certification
• Linux+ Certification
• Cisco Certified Network Associate (CCNA)