PTAC 2446 Process Troubleshooting PTAC 2446 6K1

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

MODE OF INSTRUCTION
Face to Face

PREREQUISITE/CO-REQUISITE:
PTAC 1302, PTAC 1410, MATH 1332 or 1314, PTAC 1332.

COURSE DESCRIPTION
Instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems.

COURSE OBJECTIVES
Upon completion of this course, the student will be able to
1. Collect data and identify techniques for troubleshooting.
2. Utilize applicable troubleshooting methods to solve process problems.

INSTRUCTOR CONTACT INFORMATION
Instructor: Bobby Sweeney
Email: rwsweeney@lit.edu
Office Phone: 409-951-5703
Office Location: T5 Building room 108C
Office Hours: Tuesday 12:30 to 1:30 pm

REQUIRED TEXTBOOK AND MATERIALS
Instructor will provide handouts and troubleshooting exercises.

ATTENDANCE POLICY
1. Missing more than 20% of classes will result in an automatic “F” for the course.
2. Absences are counted for unexcused, excused and coming to class late.
3. Missing more than 20% of a class period will count as an absence.
4. Being tardy 2 times equals 1 absence.

Approved: Initials/date
**DROP POLICY**

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

**COURSE CALENDAR**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>READINGS (Due on this Date)</th>
<th>ASSIGNMENTS (Due on this Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Process variables</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>2</td>
<td>Process instrumentation</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>3</td>
<td>Process controllers</td>
<td>Instructor handouts, exercises. Lab assignment.</td>
<td>Problem solving exercises. Exam 1</td>
</tr>
<tr>
<td>4</td>
<td>Troubleshooting steps</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>5</td>
<td>Decanter systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>6</td>
<td>Reaction systems</td>
<td>Instructor handouts, exercises. Lab assignment.</td>
<td>Problem solving exercises. Exam 2</td>
</tr>
<tr>
<td>7</td>
<td>Distillation systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>8</td>
<td>Distillation systems</td>
<td>Instructor handouts, exercises. Lab assignment.</td>
<td>Problem solving exercises. Exam 3</td>
</tr>
<tr>
<td>9</td>
<td>Distillation systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>10</td>
<td>Furnace systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>11</td>
<td>Process control systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>12</td>
<td>Adsorption systems</td>
<td>Instructor handouts, exercises. Lab assignment.</td>
<td>Problem solving exercises. Exam 4</td>
</tr>
<tr>
<td>13</td>
<td>Steam systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>14</td>
<td>Absorption and stripping systems</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
<tr>
<td>15</td>
<td>Review</td>
<td>Instructor handouts, exercises.</td>
<td>Problem solving exercises</td>
</tr>
</tbody>
</table>
Instructor handouts, exercises.

Final Exams

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Lab assignments 20%
- Exercises 20%
- Exams 40%
- Final Exam 60%

GRADE SCALE

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

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi 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](http://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**
Course weekly schedule subject to change based on LIT or Instructor conflicts.