

CENTER FOR INNOVATIVE TECHNOLOGIES  
MASTER COURSE DOCUMENT

## CMT 112 Chemical Technology 2

**Course Description:** A continuation of CMT 111. Topics include: maintenance, calibration, and use of laboratory glassware and equipment; solution preparation skills; laboratory math and statistics; and using computers for data analysis.

**Prerequisites(s):** CMT 111, CHE 121, and CHE 131

**Corequisite(s):** No corequisite

Lecture Hours: 0	Lab Hours: 3	Credit Hours: 1
Lab Fee: 105	Supplemental Fee: 0	Purpose:
<input type="checkbox"/> Transfer Assurance Guide Course (TAG)	<input type="checkbox"/> Transfer Module Course (TM)	
Course Format: Lab	Grading: A/B/C/D/F/I	
Delivery Method: <input type="checkbox"/> Web	<input type="checkbox"/> Hybrid	X Classroom
Semesters Offered: <input type="checkbox"/> Fall	X Spring	<input type="checkbox"/> Summer

### Course Primary Text:

Title: no text	Edition:
Author(s):	
Publisher:	

### Supplemental Materials:

Laboratory goggles

### Course Outcomes:

#### Course Topics:

Week 1	Laboratory Safety, PPE, Chemical Waste
Week 2	Excel spreadsheets , Pass out journal and list of format for notebook
Week 3	Quality, MSDS link in inventory spreadsheets
Week 4	Quality, MSDS link in inventory spreadsheets
Week 5	Calibrate Balances, pH meters, Write protocol in journal, sign
Week 6	Calibrate pipettes, Verniers, pH, temperature, colorimeter , Write protocol in journal, sign
Week 7	Pipeting skills, Write protocol in journal, sign

CENTER FOR INNOVATIVE TECHNOLOGIES  
MASTER COURSE DOCUMENT

Week 8	Molarity and Normality of Solutions, Write protocol in journal,
Week 9	Prepare Lab solutions, Write protocol in journal, sign
Week 10	Standardize solutions, Write protocol in journal, sign
Week 11	Prepare Standards and Excel Calibration Curve
Week 12	Separation Techniques, Write protocol in journal, sign
Week 12	Career Building
Week 13	Laboratory Practical, Complete Portfolio
Week 14	Mock Interviews
Week 15	Mock Interviews, Career Portfolio Due

### Methods of Evaluation/Assessment

X Formative:                      X Summative

List assessment activities (e.g. quizzes, discussions, essays, research papers, debates, oral presentations, exams):

Attendance-	14 x 20=	280
Chemical separation procedure (SOP)	50	
Career Portfolio		
Lab Journal		250
Resume	30	
Cover letter		10
Business Contacts spreadsheet	10	
Letters of Recommendation (2)	10	
Application (mock or real)	10	
Interview Results	30	
Format for Lab Journal		
Index in front- pages #, dates, key words ( titles)		
Each Method- Title,		
Objective,		
Materials/Reagents,		

Course Keeper: Ann Fallon

Date Completed: 4/11/19