

Thanatochemistry

MORT1600 301

Course Description

Survey of general, organic, and biochemistry in mortuary science. Chemical principles and precautions involved in sanitation, disinfection, and public health as related to the embalming application. Review of government regulations for embalming chemicals.

Prereq: MORT 1200 and admission to the program

Coreq: MORT 1400 and MORT 1405

Semester: Summer

Course Student Learning Outcomes

- Compare, differentiate and explain selected facts of general chemistry, organic chemistry, biochemistry, and embalming chemistry.
- Define organic chemistry and describe the characteristics of organic compounds as they relate to embalming chemistry.
- List, differentiate, and calculate the representative chemicals in embalming fluid (arterial, cavity, and accessory) and describe their respective functions.
- Identify, list and analyze the potentially harmful chemicals used in the preparation room, and their regulations.
- Identify and explain the characteristics of solutions, colloids, suspensions, and the processes of diffusion and osmosis.
- Interpret and describe the essential characteristics of autolysis, hydrolysis, fermentation, and putrefaction chemistry regarding decomposition.
- Compare and contrast the essential characteristics of carbohydrates, lipids, and proteins.

Course Prerequisites

MORT 1200, MORT1500

Transfer/Certification/Licensure/Employment Information

This course is required by the Mortuary Science Program's accrediting body, ABFSE (American Board of Funeral Service Education). Content learned in the course will be on the NBE (National Board Exam) which is a required assessment for the program and for licensure.

Keys for Success (how to succeed in the course)

Attend class

Be on time (You will learn in the professional world - Early is on time, on time is "late", late is fired)

Complete assignments on time

Discuss content and ask questions when you have them (participate in class!)

Effectively communicate with your cohort and your instructor

Required Text or Materials

*image
not
available*

Title: Turning Art Into Science

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Authors: Damon de la Cruz, Robert Thaddeus Holmes

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For more information on textbook accessibility, contact Accessibility & Disability Services



Class Schedule

Due Date	Assignment Name	Assignment Type	Points
	Lesson 1 - Recorded Lecture	Discussion	0
	Lesson 1 General Chemistry	Discussion	0
	Lesson 10 - Carbohydrates and Lipids - Recorded Lecture	Discussion	0
	Lesson 11 - Preservation and Decomposition - Recorded Lecture	Discussion	0
	Lesson 12 - Embalming Chemicals - Recorded Lecture	Discussion	0
	Lesson 12 Embalming Chemicals	Discussion	0
	Lesson 13 - Hazardous Chemicals Part 1 - Recorded Lecture	Discussion	0
	Lesson 14 - Hazardous Chemicals Part 2 - Recorded Lecture	Discussion	0
	Lesson 2 - Recorded Lecture	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Lesson 2 Matter, Formulas and Radiation	Discussion	0
	Lesson 3 - Recorded Lecture	Discussion	0
	Lesson 4 - Recorded Lecture	Discussion	0
	Lesson 5 - Introduction to Organic Chemistry and Hydrocarbons - Recorded Lecture	Discussion	0
	Lesson 5 Introduction to Organic Chemistry	Discussion	0
	Lesson 6 - Alcohols, Aldehydes, Ethers, and Ketones - Recorded Lecture	Discussion	0
	Lesson 6 Alcohols, Ethers, Aldehydes and Ketones	Discussion	0
	Lesson 7 - Carboxylic Acids, Esters, Amines, and Amides - Recorded Lecture	Discussion	0
	Lesson 8 - Introduction to Biochemistry - Recorded Lecture	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Lesson 9 - Proteins - Recoded Lecture	Discussion	0
5/21	Quiz 1	Quiz	42
5/26	Chapter Review Questions Chapters 1-3	Assignment	45
5/28	Quiz 2	Quiz	50
5/28	Quiz 2- Extra Credit Vocab	Assignment	0
6/2	Chapter Review Questions Chapters 5 & 6	Assignment	25
6/9	Chapter Review Questions Chapters 8 and 9	Assignment	25
6/9	Chapter Review Questions Chapters 7	Assignment	15
6/18	Mid-term Exam	Quiz	85
6/18	Organic Compound Chart	Assignment	75
6/30	Chapter Review Questions Chapters 10 and 11	Assignment	25
7/7	Chapter Review Questions Chapter 13	Assignment	25
7/7	Chapter Review Questions Chapters 14 and 15	Assignment	25

Due Date	Assignment Name	Assignment Type	Points
7/14	Chapter Review Questions Chapters 16, 17 and 18	Assignment	15
7/16	Quiz 3	Quiz	50
7/16	Quiz 4	Quiz	50
7/21	Chapter Review Questions Chapters 12, 19, 20, 23, 24	Assignment	25
7/23	Extra Credit Opportunity- Missing Assignment	Assignment	0
7/23	Extra Credit Opportunity- Missing Assignment 2	Assignment	0
8/1	Final Exam	Quiz	100

Brief Description of Assignments/Exams

There will be review questions at the end of each chapter that are due the Sunday after the lecture. There will be some in class assignments. 4 quizzes and 2 exams (midterm and final).

Tests may be composed of multiple-choice, true false, matching, listing, short answer, and essay questions. The content will be derived from the textbook, lecture, and class discussions. The exams for this course will assess your ability to recall some of the basic terms, concepts, and principles related to the course content. They will be related to the basic foundation of knowledge needed to begin thinking critically as a funeral service professional. All quizzes and exam will be taken in class.

Assignments are to be completed on time. Homework turned in late will receive a zero. It is at the instructor's discretion to make exceptions in extenuating circumstances.

Grading Scale

Final Grades will be computed as follows

100-95 = A

94-90 = A-

89-87 = B+

86-83 = B

82-80 = B-

79-78 = C+

77-75 = C

74-71 = C-

70-67 = D+

66-64 = D

63 and below =E

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)

Additional Policies

Students are expected to be prepared, attend, and actively participate in all classroom, laboratory, clinical, and field trip activities. Attendance is vital to be successful in the SLCC Mortuary Science Program. Summer classes only meet once a week. After 2

absences you may receive a warning. After 3 absences you will be placed on probation, and if another absence occurs after that you may be dropped from the program. If a situation arises and you are unable to attend let your teacher know you will not be in class. You do not need to give a reason. There are no excused absences.

Cell phones must be put away during class and may not be on the desk. Using a cell phone without instructor approval during class is prohibited and can result in your being asked to leave the class and being counted absent from the class. If you have an emergency and must use your cell phone, please exit the classroom.

Please review the student handbook for more information.

Course Overview

Course Schedule (subject to change)

Week 1: May 14

Unit 1- Chapters 1, 2, 3 and 4: General Chemistry, Matter, Atoms and Compounds, Molecules and Reactions

Chapter Review: Each Chapter (evens only)

Week 2: May 21

Unit 2- Chapters 5 and 6

Quiz #1, Chapter Review: Both Chapters (odds only)

Week 3: May 28

Unit 3- Chapters 7: Funeral Service Chemicals *Understanding the Structure and Properties of Organic Chemicals*

Quiz #2, Chapter Reviews (1-6)

Week 4: June 4

Unit 4- Chapters 8 and 9: Antiseptics, Humectants, Cauterant, Preservatives and Disinfectants

Chapter Reviews (evens only)

Week 5: June 11

Unit 5- Chapters 10 and 11: Anti coagulants, Water Treatment, Fragrances, Decomposition Products

Chapter Reviews (evens only)

Week 6: June 18

Organic Compound Chart Due- MIDTERM EXAM

Week 7: June 25

Unit 7- Chapter 13: Introduction to Life

Chapter Review (evens only)

Week 8: July 2

Unit 8- Chapters 14 and 15: Building Blocks and Engine of Life

Chapter Reviews (odds only)

Week 9: July 9

Unit 9- Chapters 16, 17 and 18 Carbohydrates and Lipids

Chapter Reviews (1-4 each chapter)

Week 10: July 16

Unit 10- Chapters 12,19, 20 ,23, 24: Mortis, PPE, Decomposition, Preservation

Quiz #3, Chapter Reviews (evens only)

Week 11: July 23

Unit 11- Chapters 21 and 22: Hazardous Chemicals

Quiz #4, Hazardous Chemical Activity (in class) Chapter Reviews (2,4,6 each chapter)

Week 12: THURSDAY AUGUST 1

FINAL EXAM 9:20-11:20pm