

2009 Mississippi Curriculum Framework

Postsecondary Funeral Service Technology

(Program CIP-12.0301 – Funeral Service and Mortuary Science)

Direct inquiries to

Shawn Mackey
Director for Career and Technical Education
State Board for Community and Junior Colleges
3825 Ridgewood Road
Jackson, MS 39211
601.432.6518
smackey@sbcjc.cc.ms.us

Emily Reed
Instructional Design Specialist
Research and Curriculum Unit
P.O. Drawer DX
Mississippi State, MS 39762
662.325.2510
Emily.Reed@rcu.msstate.edu

Additional copies

Research and Curriculum Unit for Workforce Development
Vocational and Technical Education
Attention: Reference Room and Media Center Coordinator
P.O. Drawer DX
Mississippi State, MS 39762
<https://cia.rcu.msstate.edu/curriculum/download.asp>
662.325.2510

Published by

Office of Vocational Education and Workforce Development
Mississippi Department of Education
Jackson, MS 39205

Research and Curriculum Unit for Workforce Development
Vocational and Technical Education
Mississippi State University
Mississippi State, MS 39762

The Mississippi Department of Education, Office of Vocational Education and Workforce Development does not discriminate on the basis of race, color, religion, national origin, sex, age, or disability in the provision of educational programs and services or employment opportunities and benefits. The following office has been designated to handle inquiries and complaints regarding the nondiscrimination policies of the Mississippi Department of Education: Director, Office of Human Resources, Mississippi Department of Education, 359 North West Street, Suite 359, Jackson, MS 39201, 601.359.3511.

Acknowledgments

Writing Team

Larry Anderson, Northwest Mississippi Community College, Desoto Center, Southaven, MS
Octavia Dickerson, East Mississippi Community College, Scooba, MS
Bill Harvey, Mississippi Gulf Coast Community College, Perkinston Campus, Perkinston, MS
Tony Moore, Holmes Community College, Ridgeland Campus, Ridgeland, MS

RCU Staff

Charlotte Darnell, Author, Instructional Design Specialist
Emily Reed, Instructional Design Specialist
Robin Parker, EdD, Coordinator of Workforce Education

Professional Curriculum Advisory Team

Representative Steve Holland, Holland-Harris Funeral Home, Tupelo, MS
East Mississippi Community College Funeral Service Technology Advisory Committee
Holmes Community College Funeral Service Technology Advisory Committee
Mississippi Gulf Coast Community College Funeral Service Technology Advisory Committee
Northwest Mississippi Community College Funeral Service Technology Advisory Committee

Standards in this document are based on information from the following organizations:

Standards and Guidelines for Funeral Service Programs

American Board of Funeral Service Education, Accreditation Manual (2008), www.abfse.org/. Used with permission.

Related Academic Standards

CTB/McGraw-Hill LLC. (1994). *Tests of adult basic education, forms 7 and 8*. Monterey, CA: Author. Reproduced with permission of CTB/McGraw-Hill LLC. TABE is a registered trademark of The McGraw-Hill Companies, Inc. Copyright © 1994 by CTB/McGraw-Hill LLC. Reproduction of this material is permitted for educational purposes only.

21st Century Skills

Reproduced with permission of the Partnership for 21st Century Skills. Further information may be found at www.21stcenturyskills.org.

Preface

Funeral Service Technology Research Synopsis

Articles, books, Web sites, and other materials listed at the end of each course were considered during the revision process. Specific journals, articles, and sources were especially useful in providing insight into trends and issues in the field. These references are suggested for use by instructors and students during the study of the topics outlined.

Industry advisory team members at colleges throughout the state were asked to give input related to changes to be made to the curriculum framework. Specific comments related to soft skills needed in this program include compassion, communication skills, attention to details, caring attitude, professionalism, punctuality, work ethic, servitude, initiative, willing to work long hours, and a sense of mission and calling. Occupational-specific skills stated include funeral service knowledge, computer skills, embalming skills, arranging skills, communication skills, and interpersonal skills. Safety practices emphasized included those required by OSHA, especially the importance of wearing all personal protective equipment and adhering to universal precautions.

Instructors from colleges throughout the state were also asked to give input on changes to be made to the curriculum framework. Specific comments related to this program include statements from Advisory Committee members including more emphasis on training for waiting on families and conducting funerals, less emphasis on embalming, and review the current entrance requirements placing more emphasis on math, reading, communication, and spelling. Changes suggested for the curriculum include to ensure that the state curriculum is aligned with the ABFSE curriculum; in the chemistry course, there should be more emphasis placed on embalming chemistry and the use of these chemicals; more time should be spent on the FTC Funeral Rule; Restorative Art/Color and Cosmetics should be separated into two classes and Microbiology/Pathology combined as one; and possibly work on a small unit on certification for crematory operators.

Curriculum

The following national standards were referenced in each course of the curriculum:

- CTB/McGraw-Hill LLC *Tests of Adult Basic Education, Forms 7 and 8 Academic Standards*
- *21st Century Skills*
- *American Board of Funeral Service Education, Accreditation Manual*

Industry and instructor comments, along with current research, were considered by the curriculum revision team during the revision process; and changes were made as needed and appropriate. Many of the skills and topics noted in the research were already included in the curriculum framework. Specific changes made to the curriculum at the May 19, 2009 curriculum revision meeting include the following:

- Competencies and objectives were reviewed to ensure accuracy and appropriateness.
- Depth of knowledge level was added at each competency level.
- The course name for Restorative Art/Color and Cosmetics (FST 1523) was changed to Restorative Art.

- Clinical Embalming I–IV (FST 1231, FST 1242, FST 2251, FST 2261) were changed to core courses instead of elective courses with the exception of the local district option.
- The reference list was updated.
- The Recommended Tools and Equipment list was updated.

Assessment

Students will be assessed using the *The International Conference of Funeral Service Examining Boards, National Board Examination (NBE)*.

Professional Learning

It is suggested that instructors participate in professional learning related to the following concepts:

- How to use the program Blackboard site
- Differentiated instruction – To learn more about differentiated instruction, please go to http://www.paec.org/teacher2teacher/additional_subjects.html, and click on Differentiated Instruction. Work through this online course, and review the additional resources.

Foreword

As the world economy continues to evolve, businesses and industries must adopt new practices and processes in order to survive. Quality and cost control, work teams and participatory management, and an infusion of technology are transforming the way people work and do business. Employees are now expected to read, write, and communicate effectively; think creatively, solve problems, and make decisions; and interact with each other and the technologies in the workplace. Vocational–technical programs must also adopt these practices in order to provide graduates who can enter and advance in the changing work world.

The curriculum framework in this document reflects these changes in the workplace and a number of other factors that impact local vocational–technical programs. Federal and state legislation calls for articulation between high school and community college programs, integration of academic and vocational skills, and the development of sequential courses of study that provide students with the optimum educational path for achieving successful employment. National skills standards, developed by industry groups and sponsored by the U.S. Department of Education and Labor, provide vocational educators with the expectations of employers across the United States. All of these factors are reflected in the framework found in this document.

Referenced throughout the courses of the curriculum are the 21st Century Skills, which were developed by the Partnership for 21st Century Skills, a group of business and education organizations concerned about the gap between the knowledge and skills learned in school and those needed in communities and the workplace. A portion of the 21st Century Skills addresses learning skills needed in the 21st century, including information and communication skills, thinking and problem-solving skills, and interpersonal and self-directional skills. The need for these types of skills has been recognized for some time, and the 21st Century Skills are adapted in part from the 1991 report from the U.S. Secretary of Labor’s Commission on Achieving Necessary Skills (SCANS). Another important aspect of learning and working in the 21st century involves technology skills, and the International Society for Technology in Education, developers of the National Educational Technology Standards (NETS), were strategic partners in the Partnership for 21st Century Skills.

Each postsecondary program of instruction consists of a program description and a suggested sequence of courses that focuses on the development of occupational competencies. Each vocational–technical course in this sequence has been written using a common format, which includes the following components:

- Course Name – A common name that will be used by all community and junior colleges in reporting students
- Course Abbreviation – A common abbreviation that will be used by all community and junior colleges in reporting students
- Classification – Courses may be classified as the following:
 - Vocational–technical core – A required vocational–technical course for all students

- Area of concentration (AOC) core – A course required in an area of concentration of a cluster of programs
 - Vocational–technical elective – An elective vocational–technical course
 - Related academic course – An academic course that provides academic skills and knowledge directly related to the program area
 - Academic core – An academic course that is required as part of the requirements for an associate’s degree
- Description – A short narrative that includes the major purpose(s) of the course and the recommended number of hours of lecture and laboratory activities to be conducted each week during a regular semester
 - Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course
 - Corequisites – A listing of courses that may be taken while enrolled in the course
 - Competencies and Suggested Objectives – A listing of the competencies (major concepts and performances) and of the suggested student objectives that will enable students to demonstrate mastery of these competencies

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect the following:
 - Additional competencies and objectives within the course related to topics not found in the state framework, including activities related to specific needs of industries in the community college district
 - Activities that develop a higher level of mastery on the existing competencies and suggested objectives
 - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed or revised
 - Activities that implement components of the Mississippi Tech Prep initiative, including integration of academic and vocational–technical skills and coursework, school-to-work transition activities, and articulation of secondary and postsecondary vocational–technical programs
 - Individualized learning activities, including worksite learning activities, to better prepare individuals in the courses for their chosen occupational areas
- Sequencing of the course within a program is left to the discretion of the local district. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors.

- Programs that offer an Associate of Applied Science degree must include a minimum 15-semester-credit-hour academic core. Specific courses to be taken within this core are to be determined by the local district. Minimum academic core courses are as follows:
 - 3 semester credit hours Math/Science Elective
 - 3 semester credit hours Written Communications Elective
 - 3 semester credit hours Oral Communications Elective
 - 3 semester credit hours Humanities/Fine Arts Elective
 - 3 semester credit hours Social/Behavioral Science Elective

It is recommended that courses in the academic core be spaced out over the entire length of the program so that students complete some academic and vocational–technical courses each semester. Each community or junior college has the discretion to select the actual courses that are required to meet this academic core requirement.

- In instances in which secondary programs are directly related to community and junior college programs, competencies and suggested objectives from the high school programs are listed as baseline competencies. These competencies and objectives reflect skills and knowledge that are directly related to the community and junior college vocational–technical program. In adopting the curriculum framework, each community or junior college is asked to give assurances that:
 - Students who can demonstrate mastery of the baseline competencies do not receive duplicate instruction, and
 - Students who cannot demonstrate mastery of this content will be given the opportunity to do so.
- The roles of the baseline competencies are to:
 - Assist community and junior college personnel in developing articulation agreements with high schools, and
 - Ensure that all community and junior college courses provide a higher level of instruction than their secondary counterparts.
- The baseline competencies may be taught as special introduction courses for 3–6 semester hours of institutional credit, which will not count toward associate degree requirements. Community and junior colleges may choose to integrate the baseline competencies into ongoing courses in lieu of offering the introduction courses or may offer the competencies through special projects or individualized instruction methods.
- Technical elective courses have been included to allow community colleges and students to customize programs to meet the needs of industries and employers in their area.

In order to provide flexibility within the districts, individual courses within a framework may be customized by:

- Adding new competencies and suggested objectives.
- Revising or extending the suggested objectives for individual competencies.
- Integrating baseline competencies from associated high school programs.

- Adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the State Board for Community and Junior Colleges [SBCJC] of the change).

In addition, the curriculum framework as a whole may be customized by:

- Resequencing courses within the suggested course sequence.
- Developing and adding a new course that meets specific needs of industries and other clients in the community or junior college district (with SBCJC approval).
- Utilizing the technical elective options in many of the curricula to customize programs.

Table of Contents

Acknowledgments.....	2
Preface.....	3
Foreword.....	5
Program Description.....	10
Suggested Course Sequence	11
Funeral Service Technology Courses	13
Mortuary Anatomy I.....	13
Mortuary Anatomy II.....	15
Embalming I.....	17
Embalming II	20
Clinical Embalming I.....	23
Clinical Embalming II.....	26
Funeral Directing	29
Funeral Service Ethics and Law	32
Restorative Art.....	35
Clinical Embalming III	38
Clinical Embalming IV	41
Thanatochemistry.....	44
Funeral Merchandising and Management.....	47
Business Law	50
Microbiology.....	52
Pathology	54
Psychosocial Aspects of Grief and Death.....	56
Comprehensive Review	59
Recommended Tools and Equipment.....	62
Assessment.....	64
Appendix A: American Board of Funeral Service Education Standards.....	65
Appendix B: Related Academic Standards.....	66
Appendix C: 21st Century Skills	67

Program Description

The curriculum required for educating prospective funeral service professionals is a structured series of course experiences. This program is accredited by the American Board of Funeral Service Education (3432 Ashland Avenue, Suite U, St. Joseph, MO 64506; 816.233.3747).

The goal of the program is to provide training that prepares students for entry-level positions after graduation and licensure. The curriculum is designed to provide students the following:

- Ethical and professional knowledge in funeral service education
- Exposure to career options available within the funeral service field
- Experiences in the application of ethical and professional skills while emphasizing aspects of public health

The Funeral Service Technology program is a 2-year program leading to an Associate of Applied Science degree.

The industry standards are taken from the American Board of Funeral Service Education Accreditation Manual.

Suggested Course Sequence*

Funeral Service Technology

FIRST YEAR

3 sch Mortuary Anatomy I (FST 1113)	3 sch Mortuary Anatomy II (FST 1123)
4 sch Embalming I (FST 1214)	5 sch Embalming II (FST 1225)
3 sch Funeral Directing (FST 1313)	3 sch Funeral Service Ethics and Law (FST 1413)
3 sch Written Communications Elective	3 sch Restorative Art (FST 1523)
3 sch Math/Science Elective	3 sch Oral Communications Elective
1 sch Clinical Embalming I (FST 1231)	1 sch Clinical Embalming II (FST 1241)
17 sch	18 sch

SECOND YEAR

3 sch Microbiology (FST 2623)	3 sch Principles of Accounting I (ACC 1213)
3 sch Pathology (FST 2633)	3 sch Funeral Merchandising and Management (FST 2323)
3 sch Psychosocial Aspects of Grief and Death (FST 2713)	1 sch Comprehensive Review (FST 2811)
3 sch Social/Behavioral Science Elective	3 sch Humanities/Fine Arts Elective
3 sch Related Elective****	3 sch Science Elective***
3 sch Elective†	3 sch Related Elective*****
1 sch Clinical Embalming III (FST 2251)	1 sch Clinical Embalming IV (FST 2261)
19 sch	17 sch

* Students who lack entry-level skills in math, English, science, and so forth will be provided related studies.

*** Science Elective:
Thanatochemistry (FST 2273)
Any related academic science by permission of instructor

***** Related Elective:
Any related vocational or academic course approved by the instructor

- † Approved Electives:
Computer applications course (3 sch) – Vocational or academic by permission of instructor
Entrepreneurship (MMT 2513)
Legal Environment of Business (BAD 2413)
Business Law (FST 2423)

Funeral Service Technology Courses

Course Name: Mortuary Anatomy I

Course Abbreviation: FST 1113

Classification: Vocational–Technical Core

Description: This course focuses on the study of the human body with particular emphasis on those systems providing the foundation for embalming, pathology, public health, and restorative arts. (3 sch: 3-hr lecture)

Prerequisite: None

Competencies and Suggested Objectives
<ol style="list-style-type: none"> 1. Discuss human anatomical structure as it relates to the embalming process. ^{FS 1} <ol style="list-style-type: none"> a. Describe types of anatomy, anatomical position, anatomical references, and gross anatomical division of the human body. b. Explain osteology of the human body, and list the divisions and individual structures of the human skeleton. c. Identify the names and general locations, functions, and definitions of actions of the human muscular system. d. Discuss characteristics of the integumentary system. e. Describe the circulatory system, emphasizing the arterial and venous systems. 2. Discuss medical terminology as it applies to anatomical systems. ^{FS 1} <ol style="list-style-type: none"> a. Divide medical terms into prefixes, suffixes, and root words. b. Define medical terms based on prefixes, suffixes, and root words.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas:
Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)

- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Kapit, W., & Elson, L. M. (2001). *The anatomy coloring book* (3rd ed.). Menlo Park, CA: Benjamin Cummings Publishing.
- Mullins, D. F. (2000). *The illustrated guide to anatomy and physiology: An introductory text for the study of embalming and disease*. Columbia City, IN: H. A. Perrey and Sons.
- Netter, F. (2006). *Atlas of human anatomy* (4th ed.). Teterboro, NJ: Icon Learning Systems.
- Professional Training Schools, Inc. (2000). *Anatomy for funeral service*. Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Shier, D. N., Butler, J. L., & Lewis, R. (2009). *Hole's anatomy and physiology* (12th ed.). New York, NY: McGraw-Hill.
- Sokoll, G. J. (1998). *The art of facial reconstruction* (2nd ed.). Oakland, CA: Pretty Good Publishing.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.
- Wise, E. (2008). *Anatomy coloring book* (3rd ed.). New York, NY: Kaplan Publishing.

Course Name: Mortuary Anatomy II

Course Abbreviation: FST 1123

Classification: Vocational–Technical Core

Description: This course is a continuation of Mortuary Anatomy I, including all remaining body systems. Major emphasis is on circulatory system. (3 sch: 3-hr lecture)

Prerequisite: Mortuary Anatomy I (FST 1113)

Competencies and Suggested Objectives	
1. Discuss and compare the various systems of the body. ^{FS 1}	<ul style="list-style-type: none"> a. Identify the endocrine system and its divisions. b. Identify the divisions and structures of the nervous system. c. Identify the organs of the digestive system. d. Identify the structures and functions of the excretory system. e. Identify the structures and functions of the reproductive system. f. Identify the structures and functions of the respiratory system.
2. Apply knowledge of the circulatory system. ^{FS 1}	<ul style="list-style-type: none"> a. Examine the complexity of the circulatory system in relation to the embalming process. b. Describe the movement of blood through the body; trace the flow of blood from the heart, through the vessels of the arterial and venous systems, with the blood returning to the heart.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)

- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Kapit, W., & Elson, L. M. (2001). *The anatomy coloring book* (3rd ed.). Menlo Park, CA: Benjamin Cummings Publishing.
- Mullins, D. F. (2000). *The illustrated guide to anatomy and physiology: An introductory text for the study of embalming and disease*. Columbia City, IN: H. A. Perrey and Sons.
- Netter, F. (2006). *Atlas of human anatomy* (4th ed.). Teterboro, NJ: Icon Learning Systems.
- Professional Training Schools, Inc. (2000). *Anatomy for funeral service*. Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Shier, D. N., Butler, J. L., & Lewis, R. (2009). *Hole's anatomy and physiology* (12th ed.). New York, NY: McGraw-Hill.
- Sokoll, G. J. (1998). *The art of facial reconstruction* (2nd ed.). Oakland, CA: Pretty Good Publishing.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.
- Wise, E. (2008). *Anatomy coloring book* (3rd ed.). New York, NY: Kaplan Publishing.

Course Name: Embalming I

Course Abbreviation: FST 1214

Classification: Vocational–Technical Core

Description: This course is a basic orientation to embalming. Included are the terminology, safety procedures, and ethical protocols in preparation of human remains, physical and chemical changes in the dying process, and a study of the chemical compositions of embalming fluid. (4 sch: 3-hr lecture, 2-hr lab)

Pre/corequisite: Mortuary Anatomy I (FST 1113)

Competencies and Suggested Objectives	
1. Utilize necessary terminology as related to the funeral service industry. ^{FS 1}	<ul style="list-style-type: none"> a. Define and employ the necessary terminology to facilitate communication with members of allied professions and the public. b. Define solutions, suspensions, and emulsions. c. Differentiate between distribution, diffusion, and the processes of osmosis and dialysis. d. Discuss autolysis, hydrolysis, fermentation, and putrefaction.
2. Explain proper safety procedures as related to funeral service technology. ^{FS 1}	<ul style="list-style-type: none"> a. Explain methods of self-protection from communicable and infectious diseases and hazardous chemicals. b. Explain the concepts of sanitization, disinfection, temporary preservation, and restoration of human remains. c. Demonstrate disposal of contaminated materials from the embalming process. d. Demonstrate disposal of blood and body fluids.
3. Explain the embalming techniques and procedures. ^{FS 1}	<ul style="list-style-type: none"> a. Identify and describe the use of embalming instruments, equipment, and sundries. b. Explain embalming techniques and procedures. c. Explain the implications of the types of death to embalming.
4. Discuss the basic embalming chemicals. ^{FS 1}	<ul style="list-style-type: none"> a. List preservatives, disinfectants, and potentially hazardous chemicals used in the preparation room, and discuss precautions to be taken with these chemicals. b. Identify embalming fluid components and their functions.
5. Explain OSHA regulations in the funeral service industry. ^{FS 1}	<ul style="list-style-type: none"> a. Identify formaldehyde exposure regulations. b. Identify protective equipment required to be worn during embalming procedures. c. Discuss the Blood-borne Pathogen Rule.

STANDARDS*American Board of Funeral Service Education Standards*

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.

Neilsen, R. P. (2000). *OSHA regulations and guidelines*. New Albany, NY: Delmar Thomson Learning.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Embalming II

Course Abbreviation: FST 1225

Classification: Vocational–Technical Core

Description: This course is a continuation of FST 1214 with emphasis placed on the principles and techniques of embalming. Topics covered include linear and anatomical guides, case analyses, handling special case problems, formulating chemical solutions, a complete analysis of the circulatory system, an explanation of the equipment used in the embalming process, and methods of injection and drainage. (5 sch: 3-hr lecture, 2-hr lab, 3-hr clinical)

Pre/corequisites: Mortuary Anatomy I (FST 1113), Mortuary Anatomy II (FST 1123), and Embalming I (FST 1214)

Competencies and Suggested Objectives	
1.	Explain normal and special embalming techniques and procedures. ^{FS 1} <ol style="list-style-type: none"> a. Discuss approved techniques and standard embalming procedures. b. Explain and identify special treatments for cases involving common infections and traumatic and pathological conditions. c. Identify, define, and employ the necessary terminology to facilitate communication with members of allied professions and the public. d. Discuss skills necessary for the disinfection, preservation, and restoration of human remains.
2.	Apply knowledge and skills acquired in previous didactic and laboratory funeral service course work. ^{FS 1, FS 2} <ol style="list-style-type: none"> a. Demonstrate adequate methods of self-protection from communicable and infectious diseases and hazardous chemicals. b. Demonstrate and explain adequate methods of personal and environmental protective measures in the art and science of embalming. c. Demonstrate the proper disposal of contaminated materials, blood, and body fluids from the embalming process. d. Demonstrate the use of embalming instruments, equipment, and sundries. e. Demonstrate embalming techniques and procedures. f. Document the embalming techniques and procedures with written reports. g. Solve problems related to embalming procedures necessitated by disaster situations.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Clinical Embalming I

Course Abbreviation: FST 1231

Classification: Vocational–Technical Core or Local District Option

Description: Practically apply the theoretical principles taught in the Funeral Service Technology curriculum in the funeral establishment/commercial mortuary. (1 sch: 3-hr clinical)

Pre/corequisites: Embalming I (FST 1214) or by permission of instructor

Competencies and Suggested Objectives	
1.	Explain how the handling, treatment, and disposition of human remains meet the sociological, psychological, theological, physical, and legal requirements of family and community. <small>FS 1, FS 5, FS 6</small> a. Gain the legal authorization required for embalming. b. Discuss the impact that preparing human remains has on family and community.
2.	Recognize potential hazards in the embalming room, and utilize personal sanitation procedures. <small>FS 1, FS 2, FS 5, FS 6</small> a. Participate in personal safety and sanitation. b. Identify and describe the purpose of embalming instruments. c. Demonstrate the proper procedures associated with the disposal of contaminated waste.
3.	Participate in normal and special embalming procedures leading to fulfillment of the American Board of Funeral Service Education requirements. <small>FS 1, FS 2, FS 6</small> a. Solve problems related to embalming procedures. b. Embalm human remains. c. Gain certification of competency by the instructor.
4.	Complete case reports that describe the complete embalming operation on a case-by-case basis. <small>FS 1, FS 2, FS 5 FS 6</small> a. Formulate case analyses. b. Demonstrate the selection of embalming chemicals for each case. c. Document step-by-step procedures with a case report.

STANDARDS

American Board of Funeral Service Education Standards

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).

FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from

<http://www.abfse.org/>

Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.

Neilsen, R. P. (2000). *OSHA regulations and guidelines*. New Albany, NY: Delmar Thomson Learning.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Clinical Embalming II

Course Abbreviation: FST 1241

Classification: Vocational–Technical Core or Local District Option

Description: Practically apply the theoretical principles taught in the embalming curriculum. (1 sch: 3-hr clinical)

Pre/corequisites: Embalming I (FST 1214), Clinical Embalming I (FST 1231), and Embalming II (FST 1225)

Competencies and Suggested Objectives	
1. Maintain OSHA guidelines. ^{FS 1, FS 6}	<ol style="list-style-type: none"> a. Utilize personal protective equipment. b. Practice universal precautions. c. Dispose of hazardous wastes.
2. Continue to participate in normal and special embalming procedures leading to fulfillment of the American Board of Funeral Service Education requirements. ^{FS 1, FS 2, FS 6}	<ol style="list-style-type: none"> a. Solve problems related to embalming procedures. b. Embalm human remains. c. Gain certification of competency by the instructor.
3. Prepare case reports that describe the complete embalming operation on a case-by-case basis. ^{FS 1, FS 2, FS 5, FS 6}	<ol style="list-style-type: none"> a. Formulate case analyses. b. Demonstrate the selection of embalming chemicals for each case. c. Document step-by-step procedures with a case report.

STANDARDS

American Board of Funeral Service Education Standards

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.
- Neilsen, R. P. (2000). *OSHA regulations and guidelines*. New Albany, NY: Delmar Thomson Learning.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Funeral Directing

Course Abbreviation: FST 1313

Classification: Vocational–Technical Core

Description: This course is a study of the total funeral service environment, including history, duties, responsibilities, ethical obligations, and communication skills. (3 sch: 3-hr lecture)

Prerequisite: None

Competencies and Suggested Objectives	
1. Discuss the historical development of funeral customs. ^{FS 4, FS 5}	<ol style="list-style-type: none"> a. Trace funeral customs, merchandise, and embalming practices of historical importance from ancient Egypt to the present. b. Discuss the development of various types of funeral transportation.
2. Explain duties and responsibilities of a modern funeral director. ^{FS 4, FS 5, FS 6}	<ol style="list-style-type: none"> a. Discuss various duties of the funeral director. b. Identify responsibilities of the funeral director. c. Discuss with client families prefunded/preplanned funerals.
3. Apply effective communication skills within the funeral service profession. ^{FS 5}	<ol style="list-style-type: none"> a. Identify the elements of verbal and nonverbal communication. b. Discuss the importance of listening skills within the funeral profession. c. Recognize the significance of group dynamics. d. Demonstrate the skills needed to write a business letter, resume, obituary, and speech outline. e. Write and deliver a religious, secular, and/or alternative eulogy.
4. Discuss types of funeral services. ^{FS 4}	<ol style="list-style-type: none"> a. Identify the various types of religious, fraternal, and military funerals. b. Describe the funeral service functions to include the following: <ol style="list-style-type: none"> (1) the funeral home chapel (2) the church (3) graveside service (4) cortege c. Describe nontraditional funerals, including cremation and green funerals. d. Participate in a simulated funeral service.

STANDARDS

American Board of Funeral Service Education Standards

FS4 The curriculum must involve a distribution of study in the following content areas: Accounting, Funeral Home Management and Merchandising, Computer Application, Funeral Directing, and Small Business Management.

- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Habenstein, R. W., & Lamers, W. M. (2007). *The history of American funeral directing* (6th ed.). Milwaukee, WI: National Funeral Directors Association.

Klicker, R. L. (2008). *Funeral directing and funeral service management*. Buffalo, NY: Thanos Institute.

Professional Training Schools, Inc. (1994). *Types of funeral services and funerals*. Dallas, TX: Professional Training Schools, Inc.

Professional Training Schools, Inc. (2002). *Funeral rites and customs*. Dallas, TX: Professional Training Schools, Inc.

Rolph, R. & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Course Name: Funeral Service Ethics and Law

Course Abbreviation: FST 1413

Classification: Vocational–Technical Core

Description: Comprehensive review of the ethical and legal aspects involved in funeral service.
(3 sch: 3-hr lecture)

Prerequisite: None

Competencies and Suggested Objectives	
1.	Discuss the application of ethical principles to funeral service. ^{FS 6} a. Distinguish between legal and ethical issues. b. Demonstrate an understanding of terms associated with ethical issues and practices. c. Apply a standard of ethical behavior in personal and professional conduct.
2.	Identify the various sources of funeral service law. ^{FS 6} a. Describe the purpose, development, and growth of funeral service law. b. Discuss the types of funeral service law. c. Explain the impact that administrative agencies have on funeral service law. d. Discuss how statutes, ordinances, and contracts affect funeral home operation. e. Discuss the requirements and impact of FTC, OSHA, and ADA on funeral service.
3.	Explain legal aspects of being a licensed funeral director/embalmer. ^{FS 6} a. Discuss the requirements for becoming a licensed funeral director/embalmer. b. Discuss the responsibilities of funeral directors in their day-to-day operations. c. Identify reasons for revocation, suspension, or refusal to renew or issue licenses.
4.	Explain the legal status of human remains. ^{FS 6} a. Explain the concepts of death. b. Describe what constitutes human remains. c. Explain the obligations of accepting final disposition. d. Discuss liability for funeral expenses.
5.	Explain the legal implications of committing torts. ^{FS 6} a. Explain what constitutes torts involving human remains. b. Discuss the penalties for committing a tort.
6.	Explain what constitutes mental anguish. ^{FS 6} a. Discuss what constitutes mental anguish. b. Discuss the physical impact rule. c. Discuss the penalties for mental anguish.
7.	Explain the establishment and operation of a funeral home and/or cemetery. ^{FS 6} a. Recognize the restrictions that exist for establishing a funeral home and/or cemetery. b. Classify regulatory specifications of funeral homes and/or cemeteries.

STANDARDS*American Board of Funeral Service Education Standards*

FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills

CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Ashcroft, J. D., & Ashcroft, J. E. (2008). *Law for business* (16th ed.). Cincinnati, OH: West Publishing Company.

Federal Trade Commission. (n.d.). *Complying with the funeral rule*. Retrieved June 6, 2009, from <http://www.ftc.gov/bcp/edu/pubs/business/adv/bus05.shtm>

Klicker, R. L. (1995). *Ethics in funeral service*. Buffalo, NY: Thanos Institute.

Rolph, R. & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Stueve, T. F., & Gilligan, T. S. (2003). *Mortuary law* (10th ed.). Cincinnati, OH: The Cincinnati Foundation for Mortuary Education.

Course Name: Restorative Art

Course Abbreviation: FST 1523

Classification: Vocational–Technical Core

Description: An in-depth study of anatomical modeling, including familiarization with instruments, materials, and techniques of rebuilding human features, this course focuses on the study of color theory and application of restorative techniques in the funeral setting, which includes cosmetics and hair treatment. (3 sch: 2-hr lecture, 2-hr lab)

Prerequisite: None

Competencies and Suggested Objectives	
1. Identify and describe anatomical features as related to the head and face. ^{FS 1, FS 3}	<ol style="list-style-type: none"> a. Identify the surface bones of the cranium and the face. b. Distinguish among the facial portions, racial differences, measurements, facial profiles, head forms, and bilateral forms of the head and features. c. Identify facial markings and facial features contributed by facial muscles. d. Exhibit a skill in modeling that reflects the student's ability to restore a problem case.
2. Describe color theory and application to restorative techniques in the funeral setting. ^{FS 1, FS 3}	<ol style="list-style-type: none"> a. Relate specified types of restoration to the correct embalming procedures. b. Identify and describe the use of various cosmetic and restorative treatments, materials, and equipment. c. Classify and explain the principles of pigmentary (color) mixtures, and relate their application to cosmetic compounds and the influence of adjacent colors on one another in the funeral setting. d. Select (from a specified cosmetic medium) the correct colorants (compounds) to achieve a natural appearance under various conditions. e. Demonstrate basic knowledge of the color spectrum, color measurement, pigment theory, and light in color. f. Perform internal and external cosmetology coloring methods for applications to human remains. g. Demonstrate hygiene, disinfection, and treatment prior to arrangement of the hair of the deceased. h. Demonstrate proper treatment, care, and arrangement of hair of the deceased.

STANDARDS*American Board of Funeral Service Education Standards*

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS3 Each student must participate in an on-campus course, in which the application of Restorative Art principles is practiced in a laboratory setting.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M6 Fractions (addition, subtraction, multiplication, division)
- M8 Percents
- A2 Number Theory (ratio, proportion)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Klicker, R. L. (2002). *Restorative art and science*. Buffalo, NY: Thanos Institute.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Sokoll, G. J. (1998). *The art of facial reconstruction* (2nd ed.).Oakland, CA: Pretty Good Publishing.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Clinical Embalming III

Course Abbreviation: FST 2251

Classification: Vocational–Technical Core or Local District Option

Description: Practically apply the theoretical principles taught in Funeral Service Technology curriculum in the funeral establishment/commercial mortuary. (1 sch: 3-hr clinical)

Pre/corequisites: Clinical Embalming I (FST 1231), Clinical Embalming II (FST 1241), and Embalming I (FST 1214)

Competencies and Suggested Objectives	
1.	Formulate a case analysis based on the body presented, and relate the analysis to legal regulations leading to fulfillment of the American Board of Funeral Service Education requirements. ^{FS 1, FS 2, FS 5, FS 6}
	<ul style="list-style-type: none"> a. Actively participate in the arterial and cavity embalming of human remains. b. Perform case analysis. c. Explain the conditions whereby notification of death is required to public officials.
2.	Perform the terminal tasks associated with embalming. ^{FS 1, FS 2, FS 6}
	<ul style="list-style-type: none"> a. Participate in a terminal disinfection of the embalming site. b. Demonstrate the various methods of suturing. c. Demonstrate the proper techniques for cavity embalming.
3.	Continue to maintain OSHA guidelines. ^{FS 1, FS 6}
	<ul style="list-style-type: none"> a. Utilize personal protective equipment. b. Practice universal precautions. c. Dispose of hazardous wastes.

STANDARDS

American Board of Funeral Service Education Standards

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.
- Neilsen, R. P. (2000). *OSHA regulations and guidelines*. New Albany, NY: Delmar Thomson Learning.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Clinical Embalming IV

Course Abbreviation: FST 2261

Classification: Vocational–Technical Core or Local District Option

Description: Practically apply the theoretical principles taught in the Funeral Service Technology curriculum in the funeral establishment/commercial mortuary. (1 sch: 3-hr clinical)

Pre/corequisites: Clinical Embalming I (FST 1231), Clinical Embalming II (FST 1241), Clinical Embalming III (FST 2251), and Embalming II (FST 1225)

Competencies and Suggested Objectives	
1. Actively participate in the arterial and cavity embalming of human remains leading to fulfillment of the American Board of Funeral Service Education requirements. ^{FS 1, FS 2, FS 5, FS 6}	
a. Raise the appropriate artery and vein.	
b. Arterially inject and aspirate human remains.	
c. Complete case reports, and explain the report to other allied health and lay people.	
2. Observe and participate in the preparation of special cases. ^{FS 1, FS 2, FS 5, FS 6}	
a. Observe and participate in a postmortem embalming case.	
b. Observe and participate in the embalming of an organ/tissue donation case.	
3. Adhere to OSHA guidelines. ^{FS 1, FS 6}	
a. Utilize personal protective equipment.	
b. Practice universal precautions.	
c. Dispose of hazardous wastes.	
4. Continue to perform the terminal tasks associated with embalming. ^{FS 1, FS 2, FS 6}	
a. Participate in a terminal disinfection of the embalming site.	
b. Demonstrate the various methods of suturing.	
c. Demonstrate the proper techniques for cavity embalming.	

STANDARDS

American Board of Funeral Service Education Standards

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.
- Neilsen, R. P. (2000). *OSHA regulations and guidelines*. New Albany, NY: Delmar Thomson Learning.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Thanatochemistry

Course Abbreviation: FST 2273

Classification: Vocational–Technical Elective

Description: This course is a survey of the principles of general, organic, biological, and embalming chemistry as they relate to the embalming process. (3 sch: 3-hr lecture)

Prerequisites: Embalming I (FST 1214)

Competencies and Suggested Objectives	
1. Relate a basic knowledge of general chemistry as it applies to the embalming process. ^{FS 1}	<ol style="list-style-type: none"> Identify and explain the terms utilized for measurement. Identify and explain the three basic states of matter. Differentiate among the various types of solutions.
2. Differentiate among the basic chemicals used in funeral service. ^{FS 1}	<ol style="list-style-type: none"> Utilize appropriate safety procedures for each chemical. Extrapolate potentially hazardous chemicals from the material safety data sheets (MSDSs). Associate each chemical with its intended use in embalming.
3. Analyze the purpose of the chemicals used in various classifications of embalming chemicals. ^{FS 1}	<ol style="list-style-type: none"> Classify each chemical as arterial, cavity, powder, or gel. Perform an embalming analysis, and relate the chemicals to that analysis.
4. Examine the chemical changes associated with the decomposition of human remains. ^{FS 1}	<ol style="list-style-type: none"> Relate chemical changes as either ante mortem or post mortem. Interpret which postmortem chemical changes are a hazard to public safety. Justify the use of embalming chemicals based on public safety hazards.
5. Analyze the eight basic classes of organic compounds and their effects in the embalming process. ^{FS 1}	<ol style="list-style-type: none"> Differentiate between organic and inorganic chemistry. Compare organic compounds to inorganic compounds. Categorize the types of embalming fluids based upon their utilization of organic compounds in the embalming process.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Dorn, J. M., & Hopkins B. M. (1997). *Thanatochemistry: A survey of general, organic, and biochemistry for funeral service professionals* (2nd ed). Upper Saddle River, NJ: Prentice Hall.

- Mayer, R. G. (2006). *Embalming history, theory, and practice* (4th ed.). New York, NY: McGraw-Hill Medical.
- Professional Training Schools, Inc. (1999). *Chemistry* (1st ed.). Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Funeral Merchandising and Management

Course Abbreviation: FST 2323

Classification: Vocational–Technical Core

Description: This course is a study of merchandising and management procedures necessary to operate a successful funeral practice. (3 sch: 3-hr lecture)

Prerequisites: None

Competencies and Suggested Objectives	
1.	Recognize the component parts of funeral merchandising. ^{FS 4} a. Identify materials used in the construction of caskets: (1) Component parts (2) Interior material (3) Types (4) Styles b. Identify the different types, styles, and materials of outer burial containers. c. Identify alternatives to traditional funeral service merchandise to include urns, rental caskets, and so forth.
2.	Formulate merchandising strategies. ^{FS 4} a. Discuss pricing philosophies. b. Utilize effective methods of merchandise display and presentation. c. Describe how merchandise is requisitioned and the various methods utilized. d. Explain the importance of pre-need and at-need sales. e. Discuss the importance of monitoring and evaluating sales.
3.	Discuss management techniques and theory as related to funeral service practice. ^{FS 4, FS 5} a. Identify the goals and objectives of funeral service management. b. Describe management functions as they relate to funeral service practice. c. Discuss contemporary concepts of funeral service management as they relate to client families and community, staff personnel, and professional associates. d. Discuss communication techniques used in contemporary funeral service with client families and community. e. Identify various areas of management. f. Discuss operational procedures specific to funeral service. g. Explain how credit and collections programs are managed in the funeral home. h. Discuss the various types of funeral management software available to the funeral service professional. i. Explain the importance of managing a funeral home's capital assets. j. Identify future trends in funeral service practice.

STANDARDS*American Board of Funeral Service Education Standards*

- FS4 The curriculum must involve a distribution of study in the following content areas: Accounting, Funeral Home Management and Merchandising, Computer Application, Funeral Directing, and Small Business Management.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- Adams, A. A., & Adams, R. T. (2000). *Effective communications for funeral service professionals* (2nd ed.). Dallas, TX: Professional Training Schools, Inc.
- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Federal Trade Commission. (n.d.). *Complying with the funeral rule*. Retrieved June 6, 2009, from <http://www.ftc.gov/bcp/edu/pubs/business/adv/bus05.shtm>
- Klicker, R. L. (2008). *Funeral directing and funeral service management*. Buffalo, NY: Thanos Institute.
- Professional Training Schools, Inc. (2005). *Mortuary administration and funeral management* (2nd ed.). Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Course Name: Business Law

Course Abbreviation: FST 2423

Classification: Vocational–Technical Elective

Description: This course is designed to introduce the student to the bodies of law and the judicial system as applied to day-to-day operations of a funeral home. (3 sch: 3-hr lecture)

Prerequisite: None

Competencies and Suggested Objectives	
1. Discuss the legal framework of business. <small>FS 4, FS 5, FS 6</small>	<ol style="list-style-type: none"> a. Explain the basic principles of law. b. Explain the purpose, development, and growth of law. c. Describe the basic functions of law.
2. Explain governmental regulations. <small>FS 4, FS 5, FS 6</small>	<ol style="list-style-type: none"> a. Discuss the Sherman Act. b. Discuss the Robinson-Patman Act. c. Discuss the Clayton Act. d. Discuss the Federal Trade Commission Act (FTC). e. Discuss the Americans with Disabilities Act (ADA). f. Explain the function of the Uniform Commercial Code. g. Discuss the Federal Truth-In-Lending Act. h. Discuss Title VII of the Civil Rights Act. i. Discuss the Fair Labor Standards Act (FLSA). j. Explain OSHA regulations.
3. Describe contracts/legal agreements used in the funeral industry. <small>FS 4, FS 6</small>	<ol style="list-style-type: none"> a. Explain the formalities of a contract. b. Discuss the elements of a contract. c. Discuss the performance of contracts. d. Discuss the classification of contracts. e. Discuss the termination of contracts.

STANDARDS

American Board of Funeral Service Education Standards

- FS4 The curriculum must involve a distribution of study in the following content areas: Accounting, Funeral Home Management and Merchandising, Computer Application, Funeral Directing, and Small Business Management.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Ashcroft, J. D., & Ashcroft, J. E. (2008). *Law for business* (16th ed.). Cincinnati, OH: West Publishing Company.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Course Name: Microbiology

Course Abbreviation: FST 2623

Classification: Vocational–Technical Core

Description: This course is designed to present the basic principles of microbiology and prevention of the spread of microorganisms as related to the embalming procedure and protection of the public health. (3 sch: 3-hr lecture)

Pre/corequisites: Mortuary Anatomy I (FST 1113)

Competencies and Suggested Objectives	
1.	Explain the basic principles of microbiology as it relates to the embalming procedure. ^{FS 1} a. Explain basic microbial morphology and physiology. b. Describe the fundamentals of the infectious processes and nonspecific and specific defense mechanisms against disease. c. Discuss control of microorganism for protection of the public health.
2.	Explain the methods of transmission of infectious diseases, and describe the control procedure of these diseases with special emphasis on protection to the embalmer, the funeral director, and the public. ^{FS 1} a. Differentiate between the indigenous microorganisms and pathogens and/or opportunists causing disease commonly associated with the human host and human remains. b. Demonstrate knowledge of host–parasite relationships and interactions and the requirements for successful parasitism. c. Describe and demonstrate knowledge of personal and environmental disinfection and decontamination procedures by proper use of chemical disinfection and sterilization procedures.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)

- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Mullins, D. F. (2006). *Pathology and microbiology for mortuary science*. Clifton Park, NY: Thomson Delmar Learning.
- Professional Training Schools, Inc. (2002). *Microbiology for funeral service*. Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Pathology

Course Abbreviation: FST 2633

Classification: Vocational–Technical Core

Description: This course focuses on the study of pathological disease conditions and how they affect various parts of the body, with particular emphasis on those conditions that relate to or affect the embalming or restorative art process. (3 sch: 3-hr lecture)

Pre/corequisites: Mortuary Anatomy I (FST 1113) and Microbiology (FST 2623)

Competencies and Suggested Objectives	
1.	Explain disease conditions and how they affect various parts of the body as related to the embalming or restorative art process. ^{FS 1} a. Demonstrate knowledge of diseases. b. Discuss related terminology that will enable competent communication with members of the medical community, allied professionals, and surviving family members.
2.	Recognize why the pathological conditions and etiological factors require special procedures in the removal, handling, preparation, and disposition of human remains. ^{FS 1} a. Discuss the impact of pathological conditions in human remains on public health. b. Describe the benefits derived from the postmortem examination of human remains. c. Understand the relationship between the disease process and embalming analysis.

STANDARDS

American Board of Funeral Service Education Standards

FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Mullins, D. F. (2006). *Pathology and microbiology for mortuary science*. Clifton Park, NY: Thomson Delmar Learning.
- Netter, F. (2006). *Atlas of human anatomy* (4th ed.). Teterboro, NJ: Icon Learning Systems.
- Professional Training Schools, Inc. (2005). *Pathology for funeral service*. Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.
- Venes, D. (2009). *Taber's cyclopedic medical dictionary* (21st ed.). Philadelphia, PA: F. A. Davis.

Course Name: Psychosocial Aspects of Grief and Death

Course Abbreviation: FST 2713

Classification: Vocational–Technical Core

Description: A study of various social groups and their relationships to the funeral, death, and disposition, this course includes psychological aspects of emotions with emphasis on counseling techniques and grief resolution. (3 sch: 3-hr lecture)

Prerequisite: None

Competencies and Suggested Objectives	
1.	Explain the social phenomena that affect all elements of funeral service. ^{FS 5, FS 6} a. Discuss the application and purpose of sociology in funeral service. b. Discuss the cultural requirement and cultural diversities of each family the funeral director is privileged to serve. c. Recognize the family governing systems found in society. d. Explain the different types of family structure. e. Discuss the changing social factors affecting American funeral rites.
2.	Discuss the psychosocial aspects of death and dying. ^{FS 5, FS 6} a. Discuss the purposes of the funeral. b. Recognize the typical responses experienced during the emotion of grief. c. Describe the theories of grief including anticipatory grief, normal post-loss grief, and complicated post-loss grief. d. Discuss issues relating to children and death. e. Explain how grief affects the functioning of a family in terms of family roles, communication patterns, and expressing affection. f. Recognize the difference between grief counseling and grief therapy. g. Discuss the legal limitations of the funeral director. h. Describe after-care services, and recognize the importance of making referrals to the appropriate community resources.

STANDARDS

American Board of Funeral Service Education Standards

- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- A1 Numeration (ordering, place value, scientific notation)
- A3 Data Interpretation (graph, table, chart, diagram)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

- American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>
- Klicker, R. L. (2007). *Funeral service psychology and counseling*. Buffalo, NY: Thanos Institute.
- Leming, M. R., & Dickinson, G. E. (2002). *Understanding death, dying, and bereavement* (5th ed.). Belmont, CA: Wadsworth.
- Professional Training Schools, Inc. (2002). *Sociology for funeral service* (3rd ed.). Dallas, TX: Professional Training Schools, Inc.
- Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Worden, J. W. (2008). *Grief counseling and grief therapy* (4th ed.). New York, NY: Springer Publishing Company.

Course Name: Comprehensive Review

Course Abbreviation: FST 2811

Classification: Vocational–Technical Core

Description: This course offers a review of the entire curriculum, culminating with an exam designed to prepare students for the National Board Examination. (1 sch: 1-hr lecture)

Prerequisites: To be taken during the final semester of course work. Student must have a cumulative GPA of 2.0 or better.

Competencies and Suggested Objectives	
1. Review material to pass the National Board Examination.	FS 1, FS 4, FS 5, FS 6
a. Discuss exam content areas.	
b. Discuss test-taking skills.	
2. Participate in exams to prepare for the National Board Examination.	FS 1, FS 4, FS 5, FS 6
a. Perform weekly mock exams.	
b. Complete a comprehensive exam.	

STANDARDS

American Board of Funeral Service Education Standards

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS4 The curriculum must involve a distribution of study in the following content areas: Accounting, Funeral Home Management and Merchandising, Computer Application, Funeral Directing, and Small Business Management.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics

Related Academic Standards

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)

- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

Copyright © 1994 by CTB/McGraw-Hill LLC

21st Century Skills

- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

SUGGESTED REFERENCES

American Board of Funeral Service Education. (n.d.). Retrieved June 6, 2009, from <http://www.abfse.org/>

Professional Training Schools, Inc. (2002). *Funeral service compend* (6th ed.). Dallas, TX: Professional Training Schools, Inc.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Arts*. Mesa, AZ: Author.

Rolph, R., & Taggart, T. R. (2008). *National board review for funeral service practitioners: Sciences*. Mesa, AZ: Author.

Shepard, G. (2007). *Morticians assessment testing simulator (M.A.T.S.) Version 4.00* [DVD]. Cheektowaga, NY: L & S Services.

Recommended Tools and Equipment

CAPITALIZED ITEMS

Aspirator, Electric 1/4 HP, Dual Water Attachment
Autoclave w/Dryer (1 per program)
Cabinet, Instrument, Glass Doors Locking (1 per program)
Camcorder, VHS, 8x, Power Zoom Fl. 6 lens (1 per program)
Casket Bier
Cemetery Canopy (15 ft by 15 ft)
Chapel Setting
Computer, PC with accessories (1 per 4 students)
Cot, Mortuary/Ambulance, One-person (1 per program)
Devotional Setting
Embalming Machines, one of each type (2 per program)
Eye Wash Station, Water in-line (1 per program)
Heart Model
Human Torso
Lowering Device with Placer and Riser (telescopic)
Mannequin, Weighted (105-lb min.)
Microscope, Eyepiece (10X minimum) (1 per 4 students)
Porto-Lift Casket/Body, Hydraulic (1 per program)
Printer (1 per 2 computers)
Skeleton
Table, Dressing, Variable Heights (1 per program)
Table, Embalming, Hydraulic, Stainless Steel (1 per program)
Table, Embalming, Portable, Stainless Steel (1 per program)
Truck, 3 Position, Casket, Church (1 per program)
Water Control Unit with Air Suction (1 per program)

NON-CAPITALIZED ITEMS

Aneurysm Hooks, Retractor, Stainless Steel (2 per program)
Aneurysm Hooks with Vessel Expander (1 per program)
Arm and Hand Positioner (1 per program)
Arterial Tubes, Curved, various sizes (1 per size, 6 total per program)
Arterial Tube, "Y" Fitting with twin stopcocks (1 per program)
Artificial Grass (15 ft by 15 ft)
Aspirator, Autopsy, Non-clogging, Chrome (1 per program)
Body Mover, Plastic Board (1 per program)
Body Positioner (3 per program)
Cart, Utility, 3 Shelf Stainless Steel (1 per program)
Chairs, Folding, Aluminum/Metal (12 per program)
Casket Display Stand
Cosmetic Makeup Kit
Drainage Tubes, various sizes (6 per program/various sizes)

First Aid Kit (1 per program)
Forceps, Drainage, 7 in., Spring (1 per program)
Forceps, Stainless Steel, various sizes (1 per size, 6 total per program)
Groove Director, Stainless Steel (1 per program)
Head Block/Rest (1 per program)
Head, Human, Anatomical, 6 part (1 per program)
Hemostats, Stainless Steel, various sizes (1 per size)
Incision Spreader, Stainless Steel, Spring (1 per program)
Injector, Cavity, Chemical, Stainless Steel (1 per program)
Injector, Needle, Mouth Closure, Stainless Steel (1 per program)
Injector, Needle, Electric (1 per program)
Needle, Surgical Stainless Steel, various sizes (1 of each)
Personal Protective Kits (10 sets per student, minimum)
Scissors, Stainless Steel, various sizes (1 of each size)
Shower, Emergency Drench (1 per program)
Spill Kit (1 per program)
Stand, Instrument, Stainless Chrome (1 per program)
Table, Laboratory, Student (1 per 4 students)
Trocar, Cavity, various sizes (1 of each size)
Trocar, Hypodermic Handle Value, 16 1/2 in., 3/16 in. (1 per program)
Trocar, Infant, with Stopcock
Tube, Nasal Aspirating, Curved, Slip Hub (1 per program)
Utility Shear, Dressing, Heavy Duty (1 per program)

INSTRUCTIONAL AIDS

Computer Workstation, Wood (1 per computer)
Interactive Whiteboard (1 per program)
Projector, Overhead (1 per program)
Projection System
Stand, TV/VCR/DVD, 2-shelf w/electrical cord (1 per program)
TV (35 in.)
VCR/DVD

Assessment

Students will be assessed using the *International Conference of Funeral Service Examining Boards, National Board Examination (NBE)*.

Appendix A: American Board of Funeral Service Education Standards

Taken from the American Board of Funeral Service Education Accreditation Manual

- FS1 The curriculum must involve a distribution of study in the following content areas: Chemistry, Microbiology and Public Health, Anatomy, Pathology, Embalming, and Restorative Art.
- FS2 Each student shall actively participate either on campus or in a practicum experience, in the arterial and cavity embalming of at least 10 dead human bodies, under the supervision of an approved clinical instructor or preceptor.
- FS3 Each student must participate in an on-campus course in which the application of Restorative Art principles is practiced in a laboratory setting.
- FS4 The curriculum must involve a distribution of study in the following content areas: Accounting, Funeral Home Management and Merchandising, Computer Application, Funeral Directing, and Small Business Management.
- FS5 The curriculum must involve a distribution of study in the following content areas: Dynamics of Grief, Counseling, Sociology of Funeral Service, History of Funeral Service, and Communication Skills (oral and/or written).
- FS6 The curriculum must involve study in the following content areas: Mortuary Law, Business Law, and Ethics.

Appendix B: Related Academic Standards¹

Reading

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary–paraphrase, compare–contrast, cause–effect)
- R5 Evaluate/Extend Meaning (fact–opinion, predict outcomes, point of view)

Mathematics Computation

- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations

Applied Mathematics

- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)

Language

- L1 Usage (pronoun, tense, subject–verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

Spelling

- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

¹ CTB/McGraw-Hill LLC. (1994). *Tests of adult basic education, forms 7 and 8*. Monterey, CA: Author. Reproduced with permission of CTB/McGraw-Hill LLC. TABE is a registered trademark of The McGraw-Hill Companies, Inc. Copyright © 1994 by CTB/McGraw-Hill LLC. Reproduction of this material is permitted for educational purposes only.

Appendix C: 21st Century Skills²

CS1 Global Awareness

- Using 21st century skills to understand and address global issues
- Learning from and working collaboratively with individuals representing diverse cultures, religions, and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts
- Promoting the study of non-English language as a tool for understanding other nations and cultures

CS2 Financial, Economic, and Business Literacy

- Knowing how to make appropriate personal economic choices
- Understanding the role of the economy and the role of business in the economy
- Applying appropriate 21st century skills to function as a productive contributor within an organizational setting
- Integrating one's self within and adapting continually to the nation's evolving economic and business environment

CS3 Civic Literacy

- Being an informed citizen to participate effectively in government
- Exercising the rights and obligations of citizenship at local, state, national, and global levels
- Understanding the local and global implications of civic decisions
- Applying 21st century skills to make intelligent choices as a citizen

CS4 Information and Communication Skills

- Information and media literacy skills: analyzing, accessing, managing, integrating, evaluating, and creating information in a variety of forms and media; understanding the role of media in society
- Communication skills: understanding, managing, and creating effective oral, written, and multimedia communication in a variety of forms and contexts

CS5 Thinking and Problem-Solving Skills

- Critical thinking and systems thinking: exercising sound reasoning in understanding and making complex choices; understanding the interconnections among systems
- Problem identification, formulation, and solution: ability to frame, analyze, and solve problems
- Creativity and intellectual curiosity: developing, implementing, and communicating new ideas to others; staying open and responsive to new and diverse perspectives

CS6 Interpersonal and Self-Directional Skills

- Interpersonal and collaborative skills: demonstrating teamwork and leadership, adapting to varied roles and responsibilities, working productively with others, exercising empathy, and respecting diverse perspectives
- Self-direction: monitoring one's own understanding and learning needs, locating appropriate resources, and transferring learning from one domain to another
- Accountability and adaptability: exercising personal responsibility and flexibility in personal, workplace, and community contexts; setting and meeting high standards and goals for one's self and others; tolerating ambiguity

² *21st century skills*. (n.d.). Washington, DC: Partnership for 21st Century Skills.

- Social responsibility: acting responsibly with the interests of the larger community in mind; demonstrating ethical behavior in personal, workplace, and community contexts