



North Central Michigan College Master Course Syllabus

PART 1:

Course Name: Survey of Glass Techniques II

Course Number: ARTS 231

Credit Hrs. 3 Lecture Hrs. 1 Lab Hrs. 3 Clinical Hrs. 0 Variable Hrs. 0

Total Hours of Instruction: 3 Total Contact Hours: 52.8
(Total Contact hour's formula: (lecture hrs. + lab hrs. + clinical hrs) x 17.6)

Course Description:

In this hands-on overview of glass forming techniques students will further their experience with embossed, etched, slumped and fused glass, kiln cast, assembled, and cold worked glass.

Prerequisite (s): ARTS 230

Co-requisite (s): None

Course Objectives:

By the end of this course the student should be able to:

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Define the following terms: thermal stress, firing schedule, glass recipe, annealing schedule, mass, heat sink, annealing, coefficients of expansion, open face molds, plaster-silica investment, pate de verre.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.
- Develop a timeline of the history of glass.

Reasonable accommodations can be provided for students with documented disabilities. Please contact Learning Support Services to arrange for these (231)348-6687 or (231)348-6817, Room 533 SCRC.



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PART 2:

Lumina DQP outcomes and linked course objectives

(Please identify all Lumina DQP outcomes supported by this course, including the complete language of each outcome as shown on Part 3 of this syllabus. Under each Lumina DQP outcome, please list any course objectives that support the prior DQP outcome.)

Lumina DQP Outcome 1: Describes the scope and principal features of the field of study, citing at least some of its core theories and practices, and offers a similar explication of at least one related field.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.
- Develop a timeline of the history of glass.

Lumina DQP Outcome 2: Illustrates contemporary terminology used in the field.

- Define the following terms: thermal stress, firing schedule, glass recipe, annealing schedule, mass, heat sink, annealing, coefficients of expansion, open face molds, plaster-silica investment, pate de verre.

Lumina DQP Outcome 3: Generates substantially error-free products, reconstructions, data, juried exhibits or performances as appropriate to the field.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.

Lumina DQP Outcome 6: Illustrates core concepts of the field while executing analytical, practical or creative tasks.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.

Lumina DQP Outcome 7: Selects and applies recognized methods of the field in interpreting characteristic discipline-based problems.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.

Lumina DQP Outcome 10: Identifies, categorizes and distinguishes among elements of ideas, concepts, theories and/or practical approaches to standard problems.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.
- Apply the scientific concepts of thermal stress, firing schedule, glass recipe, mass, heat sink, annealing, and coefficients of expansion to produce finished glass projects.
- Develop a timeline of the history of glass.

Lumina DQP Outcome 11: Identifies, categorizes, evaluates and cites multiple information resources necessary to engage in projects, papers or performance in his or her program.

- Design and execute one glass project in the following techniques, singularly or in combination: fusing, slumping, casting, cold worked glass.



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Suggested Methods of Instruction:

Lecture, slide lecture, field trips, studio demonstrations and hands-on experience of methods and materials.

Suggested Methods of Assessment and Evaluation:

Written test, critiques of projects

Adopted Text at Time of Course Adoption/Revision:

Kiln Firing Glass – Glass Fusing Book 1 by Lundstrom & Schwoerer

Topics Covered During the Semester:

Sequence of topics and time allowance are at the discretion of the instructor

- Week1: Intro/Syllabus/Studio safety and use of tools and equipment.
Discuss firing profiles, annealing, open face molds, plaster-silica, coefficients of expansion.
Project 1: Low-Relief Kiln-Cast Architectural Tile .
- Week2: P1: Low-Relief Kiln-Cast Architectural Tile.
- Week3: P2: High-Relief Kiln Cast Form/model Clay Positive
- Week4: P2: High-Relief Kiln Cast Form/Clay Positive
- Week5: P3: Deep Reverse Carving/Directly on Plaster-Silica Mold
- Week6: P3: Deep Reverse Carving/Directly on Plaster-Silica Mold
- Week7: Final Preparation of Project 1, 2, 3
- Week8: MIDTERM TEST & MIDTERM CRITIQUE
- Week 9: P4: Box Casting Using Clay Positive & Alginate or Vinyl Negative
- Week 10: P4: Box Casting Using Clay Positive & Alginate or Vinyl Negative
- Week 11: P5: Final Project – Student sketch, plan, discuss with professor
- Week 12: Work on P5: Final Project
- Week 13: P5: – Final Project/prepare to fire in kiln
- Week 14: FINAL EXAM Finish all work on projects, prepare for final critique
- Week 15: FINAL CRITIQUE
- Week 16: Final Class discussion

Section 1 & Section 2 approved by CRDAP on: 03 25 14

Section 2 approved by AD:

Date:

Section 2 approved by CRDAP Chair:

Date:



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PART 3:

Use this reference sheet in Part 2 of Master Course Syllabus

Specialized Knowledge

1. Describes the scope and principal features of the field of study, citing at least some of its core theories and practices, and offers a similar explication of at least one related field.
2. Illustrates contemporary terminology used in the field.
3. Generates substantially error-free products, reconstructions, data, juried exhibits or performances as appropriate to the field.

Broad Integrative Knowledge

4. Describes how existing knowledge or practice is advanced, tested and revised
5. Describes and examines a range of perspectives on key debates and their significance both within the field and in society.
6. Illustrates core concepts of the field while executing analytical, practical or creative tasks.
7. Selects and applies recognized methods of the field in interpreting characteristic discipline-based problems.
8. Assembles evidence relevant to characteristic problems in the field, describes the significance of the evidence, and uses the evidence in analysis of these problems.
9. Describes the ways in which at least two disciplines define, address and interpret the importance of a contemporary challenge or problem in science, the arts, society, human services, economic life or technology.

Intellectual Skills – Analytic Inquiry

10. Identifies, categorizes and distinguishes among elements of ideas, concepts, theories and/or practical approaches to standard problems.

Intellectual Skills – Use of Information Resources

11. Identifies, categorizes, evaluates and cites multiple information resources necessary to engage in projects, papers or performance in his or her program.

Intellectual Skills – Engaging Diverse Perspectives

12. Describes how knowledge from different cultural perspectives would affect his or her interpretations of prominent problems in politics, society, the arts and/or global relations.

Intellectual Skills – Communication Fluency

13. Presents accurate calculations and symbolic operations, and explains how such calculations and operations are used in either his or her specific field of study or in interpreting social and economic trends.
14. Presents substantially error-free prose in both argumentative and narrative forms to general and specialized audiences.

Applied Learning

15. Describes in writing at least one substantial case in which knowledge and skills acquired in academic settings are applied to a challenge in a non-academic setting; applies that learning to the question; and analyzes at least one significant concept or method related to his or her course of study in light of learning outside the classroom.
16. Locates, gathers and organizes evidence on an assigned research topic addressing a course-related question or a question of practice in a work or community setting; offers and examines competing hypotheses in answering the question.

Civic Learning

17. Describes his or her own civic and cultural background, including its origins and development, assumptions, and predispositions.
18. Describes diverse positions, historical and contemporary, on selected democratic values or practices, and presents his or her own position on a specific problem where one or more of these values or practices are involved.
19. Takes an active role in a community context (work, service, co-curricular activities, etc.), and examines the civic issues encountered and the insights gained from the community experience.

The Degree Qualifications Profile was adopted by CRDAP: April 11, 2012