

FACULTY SENATE  
CURRICULUM COMMITTEE  
Approval Form

Department \_\_\_\_\_

Title \_\_\_\_\_

Sponsor(s) \_\_\_\_\_ No. of Credits \_\_\_\_\_

COURSE \_\_\_\_\_ CONCENTRATION \_\_\_\_\_

Approved by the department Graduate ( )

Not recommended by the department Undergraduate ( )

Information copies forwarded: Academic Dean; Chairman; Curriculum Committee

Signature: Department Chairman

DIVISION

Consultation on proposal has been held

Comments:



Signature: Academic Dean and/or Divisional Committee

CURRICULUM COMMITTEE

Proposal received

Open Hearing held

Returned to the department for the following reason(s):

Approved by the Curriculum Committee

Presented to Executive Committee of the Faculty Senate as information

ifications forwarded: Vice President for Academic Affairs

Signature: Chairman, Curriculum Committee

GLASSBORO STATE COLLEGE  
Department of Art

I. Course Title - Metal Casting  
Department - Art  
Sponsor - Dr. John Ottiano

II. Essence of the Proposal:

- A. The offering of an Undergraduate Course.
- B. This course will extend to the student variable credit of 3-6 semester hours.
- C. This will be a special area course within the Jewelry/Metalry concentration.
- D. Course Description: (Catalog, ...)  
This course will deal with various metal casting processes, using a variety of metals. There will be an in-depth learning experience with intensive independent work on individual projects. The execution of these projects will be determined after evaluation and consultation with the Jewelry/Metalry faculty in charge of this special area course of Metal Casting.
- E. Prerequisite:  
A successful completion of the Art Basic Core program, Jewelry/Metalry I, or by permission of the instructor teaching these special area courses in metal casting within the Jewelry/Metalry concentration.
- F. This would be an elective course, which will explore the historical and contemporary process of casting in various metals. It will also expand and present an in-depth understanding and practice of casting, which is presently impossible within the context of the Jewelry/Metalry curriculum offering.

III. Details:

- A. The present staff is most adequate. Dr. Ottiano, for the past seventeen years has researched all aspects of metal casting. He possesses the theory and practical knowledge of the field. His lectures, demonstrations, foundry work and exhibitions of metal casting place him as an authority in the area.
- B. The library facilities are adequate at present, but a continual updating is necessary. The Art Department possesses a duplicating machine to produce slides, which is in operation and staffed in order to obtain additional visual aids.
- C. The space needs and equipment are adequate.
- D. This course will provide the student with an opportunity to study the significance of casting as an art form that deals with one of a kind casting to multi-reproductions. Also its value as a fine arts medium and an industrial process. The creative and technical methods inter-relating to form an aesthetic object.
- E. Specific Objectives:
  1. To study the various processes of metal casting and their relation to the contemporary and historical scene.
  2. To appreciate the unique factor of working with various materials to form a metal object of art.
  3. To become familiar with artists/craftsmen that have used various casting processes.
  4. To study the many technical innovations in casting over the past decade.
  5. Study of the science, technology and foundry knowledge necessary in producing art forms.

F. Course Description:

To work in depth in the following areas:

1. Centrifugal Casting - Investment
2. Vacuum Assist Casting - Investment
3. Direct Pour Casting - Investment
4. Self-Cure/Self-Setting Sand Casting
5. Cuttlebone - Mold Casting
6. Rubber Mold - duplicating process
7. Piece Mold
8. Full Mold
9. Ceramic - Shell Casting
10. Lost Wax Mold
11. All the necessary construction materials and process, burn-outs, cleaning, chasing, patina, and foundry practice.

G. Teaching Methods:

1. There will be lectures, visual aids, discussions on issues pertinent in the developmental structure of the course.
2. Textbook - plus readings from various primary sources.
3. There will be periodic evaluations, individual, group and casting instructor critiques.
4. There will be a need for field trips to foundries, galleries, museums and artist/craftsmen studios.
5. The students will be required to keep a research log of class discussions, process, visuals, and any reading related to course content.
6. The learning experience will be studio problems. Concepts developed, discussed and worked out as exercises in furthering the students sensitivity to his material, idea, and self. The self-reflective understanding of totality of experience will be a major student, group, and faculty concern.

IV. Rational:

Metal casting dates back to 3200 B.C., as an art form and also as a useful object making process. The significance of the material has over the years become an integral part of man's way of life. Metal casting in industry architecture, commercial and fine arts has helped man to create and develop forms of beauty, strength, and durability. There are many forms, shapes, and textures that are unique to only metal casting. The students will be given the opportunity to expand their creative imagery through this process. Casting in metal and mold making will strengthen the students awareness of reproducing their art object and also duplicating the same image in various metals, giving a dimension of reviewing and evaluating their work in a multitude of metal colors. Designs that are impossible to acquire from sheet metal, would be a mere joy and awakening through the various processes that metal casting offers.

V. Bibliography:

1. Bovin, Murray Jewelry Making, Forest Hills, N.Y.: Murray Bovin, 1967
2. Choate, Shair Creative Casting, N.Y.: Crown Publishers Inc., 1966
3. Coleman, Ronald L. Sculpture, Wm. C. Brown Company Pub., 1968
4. Delius, Jean-Eckessley Jewelry Making, N.J.: Prentice-Hall Inc., 1975
5. Franke, Lois E. Handwrought Jewelry, Bloomington, Ill.: McKnight and McKnight Publishing Co., 1962
6. Gentile, Thomas Jewelry, Golden Press, N.Y., 1968
7. Hoffman, Malvina Sculpture Inside and Out, Crown Publishers, Inc., N.Y., 1939
8. Irving, Donald J. Sculpture Materials and Process, Van Nostrand Reinhold Co., N.Y., 1970
9. Mills, John W. Studio Bronze Casting, Fredrick A. Praeger, Pub., N.Y., 1969
10. Morton, Philip Contemporary Jewelry, A Studio Handbook, Holt, Rinehart and Winston, Inc., N.Y., 1969
11. Story, Mickey Centrifugal Casting as a Jewelry Process, Scranton, Pa., International Textbook Co., 1963
12. Struppeck, Jules The Creation of Sculpture, Henry Holt and Co., N.Y., 1952
13. Untracht, Oppi Metal Techniques for Craftsman, Doubleday and Co., Garden City, N.Y., 1968
14. Von Newman, Robert The Design and Creation of Jewelry, Chilton Book Co., Pa., 1974

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