

ED 023 826

VT 005 450

By Gilbert, Maud R., Ed., Fiedler, Belle, Ed.

Manual of an Instructional Program in Dental Assisting.

Madison Vocational, Technical, and Adult Schools, Wis.

Pub Date Aug 64

Note -86p.

EDRS Price MF -\$0.50 HC -\$4.40

Descriptors -Curriculum, \*Dental Assistants, \*Health Occupations Education, Post Secondary Education, Program Administration, Program Content, \*Program Descriptions, \*Program Guides

Identifiers -Madison, \*Madison Vocational Technical and Adult Schools, Wisconsin

This manual is for administrator and teacher use in planning a program and individual courses for adults in dental assisting in vocational, technical, and adult programs. The manual was developed by a supervisor, a teacher-coordinator, teachers, and dentists at the local level and tested in the local school. The objectives are to prepare individuals to function as chairside assistants and office managers. Curriculum components are English, Dental Office Management, Dental Assisting Typewriting, Professional Orientation, Perspective in Personal Development, Dental Laboratory Procedures, Dental Theory, First Aid, Pharmacology, and Dental Assisting Theory and Practice. Course outlines include time allotment, general descriptive statement, objectives, and general content. Two semesters including 1016 class and laboratory hours are required. Teachers should be competent practitioners and represent the areas of home economics and business education as well as dental education. Student requirements include high school graduation or equivalency, one unit of science, one unit of typing, and a twelfth grade reading level. Field experiences are described and policies in connection with (1) admission, (2) scholarship, probation and dismissals, (3) withdrawals, readmissions, and transfers, (4) graduation, (5) health program, (6) counseling program, and (7) scholarship and loans are explained. Appendixes include evaluation forms and laboratory procedure outlines. (JK)



# D E N T A L A S S I S T I N G

VT005450

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION**

**THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.**

**/ MANUAL OF AN INSTRUCTIONAL PROGRAM IN  
DENTAL ASSISTING,**

**Edited and compiled - August 1964**

**Maud R. Gilbert - Supervisor Health Occupations -  
Editor**

**Belle Fiedler - Teacher-Coordinator-Dental Assisting -  
Assistant Editor**

**Patricia Leonard - Secretary and Typist**

**ED023826**

M E M O R A N D U M

TO: The ERIC Clearinghouse on Vocational and Technical Education  
The Ohio State University  
980 Kinnear Road  
Columbus, Ohio 43212

FROM: (Person) Mrs. Maud Gilbert, RN. M. S. Ed (Agency)  
(Address) 211 North Carroll Street, Madison, Wisconsin 53703

DATE: March 29, 1968

RE: (Author, Title, Publisher, Date) Manual of an Instructional Program in  
Dental Assisting. Madison Vocational, Technical and Adult Schools,  
August, 1964.

Supplementary Information on Instructional Material

Provide information below which is not included in the publication. Mark N/A in each blank for which information is not available or not applicable. Mark P when information is included in the publication. See reverse side for further instructions.

(1) Source of Available Copies:

Agency ERIC only  
Address \_\_\_\_\_  
Limitation on Available Copies \_\_\_\_\_ Price/Unit \_\_\_\_\_  
(quantity prices) \_\_\_\_\_

(2) Means Used to Develop Material:

Development Group Supervisor, Teacher-Coordinator, Teachers, dentists.  
Level of Group Local-Maud Gilbert, Belle Fiedler, Mary Lou Masik, Dr. Rex Wiley  
Method of Design, Testing, and Trial Designed by subject matter specialists. Funded by W. K. Kellogg Grant - M. Gilbert, project officer. Tested in local school. Distributed to 24 states on request. (1965-68)

(3) Utilization of Material:

Appropriate School Setting Vocational-Technical - Post High  
Type of Program Occupational Training - immediate employment upon completion of course  
Occupational Focus Dental Assistant- chairside, lab., front office  
Geographic Adaptability Can be adapted to any region of the U.S.  
Uses of Material Course planning, teacher training  
Users of Material Teachers and vocational educators

(4) Requirements for Using Material:

Teacher Competency Occupationally competent practitioners and teachers in dental education fields  
Student Selection Criteria High school graduation or equivalency, 1 unit of science and 1 unit of typing are pre-requisites. 12th grade reading level. Curriculum ~~Time/Type/Type/~~ appeals to females. Age 18 - 50.

Supplemental Media --

Necessary \_\_\_\_\_  
Desirable \_\_\_\_\_ } (Check Which)

Describe \_\_\_\_\_

Source (agency) \_\_\_\_\_  
(address) \_\_\_\_\_

MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
Madison, Wisconsin

Board of Vocational and Adult Education

Frank G. Collester - President  
Russell E. Dresser - Vice President  
Robert D. Gilberts - Secretary  
George Hall  
Marvin E. Brickson  
Norman P. Mitby, Director

Advisory Committee

Rotating members representing the following groups.

Wisconsin Dental Society  
Dane County Dental Society  
Marquette University School of Dentistry  
Wisconsin State Board of Health  
Dane County Dental Assistant Society

Faculty of the School of Dental Assistants

Belle Fiedler - Teacher-Coordinator  
Mary Lou Masik - Teacher  
Virginia Fahey - Teacher-Business Educ. Dept.  
Margaret Nelson - Teacher-Home Econ. Dept.  
Dorothy Dittmer - Teacher-Health Occup. Dept.  
Mitzi Duxbury - Teacher-Health Occup. Dept.  
Joann Wall - Teacher-Health Occup. Dept.  
Visiting dentists - (guest lecturers)-  
Dane Co. Dental Society  
Maud R. Gilbert - Supervisor-Health Occup. Programs

## TABLE OF CONTENTS

Statement of Philosophy; .....	1 & 2
Policies.....	
Admission.....	3
Scholarship, probation and dismissals.....	4
Withdrawals, Readmissions and Transfers.....	5
Graduation.....	6
Health Program .....	7
Counseling Program .....	8
Scholarship and Loans.....	9
Job description of a Trained Dental Assistant .....	10
Dental Assisting Program of Study.....	11-12
Curriculum Components.....	13-14
English .....	15-16
Dental Office Management.....	17-18
Dental Assisting Typewriting.....	19-20
Professional Orientation.....	21-22
Perspectives in Personal Development.....	23-24
Dental Laboratory Procedures .....	25-28
Dental Theory.....	29-35
Structure and Function of Human Body.....	
Normal Nutrition .....	36-37
First Aid .....	38-39
Pharmacology.....	40
Dental Assisting, theory and practice .....	41-47

Instructions for Field Experiences in Private Dental Offices .....	48-49
First Affiliation.....	50
Student Assignment .....	
Second Affiliation .....	51-52
Affiliations --- Field Experience .....	
Dane County Health Department.....	53
Madison Health Department .....	54
Marquette University, College of Dentistry.....	55
Central Colony.....	56
Dental Supply House .....	57
Commercial Dental Laboratory .....	58
Private Dental Offices.....	59

APPENDIX

Evaluation of dental assisting student (by personnel in affiliating dental office).....	60-61
Evaluation of affiliating dental office (by student).....	62-64
Check sheet for dental assisting .....	65-66
Check sheet for radiography, roentgenography....	67-69
Check sheet for charting.....	70
Check sheet for Dental Laboratory Procedures ...	71
LABORATORY PROCEDURES.....	72-80



1.

**MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants**

**Philosophy**

The School of Dental Assistants is a division which functions within the general framework and philosophy of the Madison Vocational, Technical and Adult Schools.

The faculty supports a philosophy of education which recognizes the need of students to grow in a free and democratic atmosphere in accordance with their capabilities. It believes that learning is an on-going, active, striving process engaged in by the students as they individually and collectively carry on problem solving activities in the classroom, laboratory and clinical areas.

The faculty of the School of Dental Assistants seeks to provide learning experiences which will help the student to gain understandings, appreciations, attitudes and skills which enable the dental assistant to function with increasing effectiveness as a contributing number of the dental health team in meeting the needs of the patient.

Student experiences are planned, directed, and supervised by members of the School of Dental Assistants Faculty. The setting for these experiences is provided by affiliating dental offices and clinics in the Madison area.

The faculty believes that a balanced program of general and vocational education is needed to prepare for the occupation of dental assistant. This program should be offered to selected students with abilities to complete the program of study and become competent practitioners of dental assisting.

**Main Objectives:**

The School aims to prepare dental assistants for two roles:

- a. chair side assistant
- b. office manager

As chair side assistant she aids directly in the production of dental services at the chair. As office manager she does for the dentist those duties which do not require his technical training and which would interrupt his actual production of dental work for patients.



**Philosophy (con't.)**

**Contributory Objectives:**

**To assist the student within this defined scope:**

- 1. To develop an understanding of herself as an individual, as a student, and as a member of society.**
- 2. To maintain, demonstrate, and teach dental health principles.**
- 3. To recognize and respect the innate values of each individual.**
- 4. To develop knowledge, skills, attitudes; to help meet the dental needs of the patient.**
- 5. To develop satisfactory interpersonal relationships on the dental health team and on the community.**
- 6. To assume a continuous responsibility for her own educational growth.**
- 7. To assume responsibility for participating in her professional organizations.**

ADMISSION POLICIES

1. A written application and health history are required well in advance of anticipated entrance.
2. A transcript of high school credits showing evidence of satisfactory work is required. ("C" average or better in academic subjects.)  
One unit of typewriting and one unit of natural science is required.
3. Three character references which show her suitability for dental assisting are obtained.
4. Satisfactory performance on the pre-entrance tests.
  - a. Davis Reading Test (scores in the 35-65 percentile which is in the average range for this test.)
  - b. Otis Quick Scoring Mental Ability Test. Minimum score of 100 accepted. (Some exception is made in the minimum score if applicant has a strong high school record of achievement.)
5. Each applicant must satisfactorily pass a personal interview to determine her suitability before entering the program.
6. Applicants must be in good physical and emotional health as evidenced by a complete physical and dental examination.
7. Applicant must be a citizen of the United States or have declared her intention of becoming a citizen.
8. Applicant must be at least 17½ years of age. 50 years is the upper age limit.
9. Mothers of small (pre-school) children are not accepted, unless the care of the children is not the total responsibility of the mother.

**Policies governing scholarship requirements, probation, and dismissal.**

**A. Policies governing scholarship requirements:**

**1. The following marking system shall be used by the faculty.**

- A - 93-100                    4 points**
- B - 85-92                     3 points**
- C - 77-84                     2 points**
- D - 70-76                     1 point**
- U - below 70**

**2. Students are expected to maintain at least a "C" in each course to be eligible for clinical assignment, promotion, or graduation.**

**A student failing to achieve a "C" must repeat the subject on her own time.**

**3. Delinquency reports will be made periodically at faculty meetings and will be submitted to the Supervisor of Health Occupations.**

**The student will receive a record of delinquencies for grades lower than "C".**

**B. Policies governing probation and dismissal:**

**1. A student who does not maintain a "C" average shall be placed on academic probation upon recommendation to the Supervisor of Health Occupations and the faculty of the School of Dental Assistants.**

**2. A student who has been placed on academic probation or dismissed shall be notified in writing by the Supervisor. Letters shall be sent to parents or guardians of all students who are unmarried or under 22 years of age.**

**3. A student will be removed from probation after deficiencies have been made up.**

Policies Governing Withdrawals, Readmission, and Transfers

A. Policies governing withdrawals:

1. A student who finds it necessary to leave the program will do so after a conference with the coordinator of the School of Dental Assistants.
2. The faculty reserves the right to request the withdrawal of any student who demonstrates repeated failures in courses or in clinical practice, habitually poor grades and attitudes, and frequent delinquency in completing required assignments.

B. Policies governing readmission:

1. If a withdrawal has been of an emergency nature and has been with the consent of the faculty, and if the student has maintained a satisfactory scholastic average at the time of the voluntary withdrawal, readmission to the Dental Assisting Program may be considered upon application.
2. A student whose withdrawal has been involuntary will be ineligible for readmission.

C. Policies governing transfers:

A student who has satisfactorily completed a portion of her dental assisting education in another school may apply for admission with advanced standing.

Policies Governing Graduation Requirements:

- A. Total course requires one academic year (2 semesters).
- B. Satisfactory scholastic average and satisfactory performance in clinical practice must be maintained. A "C" average is required for graduation.

**MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants**

**Health Program - Policies**

1. A physical examination is required prior to entrance to the School of Dental Assistants. This is done by the applicant's family physician. All recommended corrections are attended to previous to entrance to the School.
2. The following immunizations are required: Smallpox, Typhoid, Polio, Tetanus.
3. The following tests are required: T.B. skin test, or chest x-ray, Hemoglobin, Wasserman, Urinalysis.
4. A dental examination is required prior to admission to the school.
5. Students who are ill and who are not living with their parents are checked on by a nurse staff member. (Telephone call or personal visit).
6. Students needing special care are referred to the proper medical person. When funds are lacking, the student is given financial assistance (Scholarship Loan Fund).
7. Vision testing is done on all students during the first week of school.
8. Audiometer testing is done on all students during the first week of school.
9. All students are weighed periodically and encouraged to maintain normal weight.



**MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS**  
**School of Dental Assistants**  
**Counseling Policies**

The dental assisting instructors function as counselors to the dental assistant. Problems in counseling beyond the aid of the instructor are referred to the supervisor for the Health Occupation Programs. Students are informed that they may consult with their respective counselor (instructor) at any time during the course of training. In addition, the supervisor's door is always open to any student who feels she has a problem.

Objectives of the counseling program:

1. To help the student in her initial adjustment to the School of Dental Assistants.
2. To offer assistance, scholastically and financially to those students in need.
3. To have the student be aware that there is always someone who follows her progress in school and is interested in her as an individual.
4. To assist students to take a problem solving approach to their difficulties by encouraging them to define their problem and think through possible course of action.

Counseling of students:

Assignment of counselors to students is done the first week of school. An initial conference is held with each student to acquaint her with the counseling program. Periodic conferences are scheduled thereafter at the discretion of the counselor and as the need arises on the part of the student. The counselor makes it a point to find out how the student is doing in her other classes. Students are encouraged to maintain passing grades in all subjects. Special help in subjects in which the student is weak may be arranged for by the counselor.

The coordinator discusses field experience assignments with all students. Brief conferences are held with all students before going on affiliation, particularly when the student is assigned to a private dental office. The coordinator reviews the evaluation of the student's clinical work. Conferences are based on these evaluations. Students are commended for work well done as well as spoken to for work poorly done. When the student has received a poor evaluation, an effort is made to determine the reasons behind it.

Prior to graduation, students are queried as to what they are going to do upon graduation from the school. Students needing help in finding a position are referred to the Health Occupations Supervisor for placement and or the Director of Student Services.

## SCHOLARSHIPS AND LOANS

### Scholarships:

At the present time there are no scholarship monies specifically provided for the student dental assistant.

### Loans:

1. Our revolving scholarship fund (Ruth Coe Memorial Fund) is available to students enrolled in the dental assisting program to help them with expenses in an emergency situation. The student does not pay interest on loan money from this fund but agrees to pay back the loan within one year from date of graduation. The student completes a loan application form and the Health Occupation Supervisor processes the loan through the scholarship committee.
2. A Wisconsin resident in need of funds to enroll in the Dental Assisting Course is eligible to apply for a state loan (S. 49.42 Wis. Statutes). Loans to a student shall not exceed \$1000.00. All loans are discretionary and dependent upon academic ability and financial need of the student. There is an interest charge made on these monies.

## DENTAL ASSISTING -- DUTIES AND RESPONSIBILITIES

The trained dental assistant's job is to help the dentist to better serve his patients. She conserves the dentist's time and contributes to a more efficient office routine by preparing the patient for examination, sterilizing the necessary instruments and equipment, and assisting the dentist during treatment procedures at the dental chair. She knows how to prepare restorative materials, lay out instruments according to type of treatment or procedure, and is proficient in keeping the operative field clean. The skilled dental assistant is proficient in many laboratory procedures which are related to the making of models, casts, inlays, and dentures. A trained dental assistant's duties also include assisting the dentist in taking x-rays; she develops and mounts the films. In the capacity of office manager she acts as receptionist, schedules appointments, keeps accounts and records, sends out statements, orders supplies, and is responsible for the general appearance of the office.

//

**MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS**  
**School of Dental Assistants**

**Dental Assisting Program of Study**

Dental Assisting is a one year (2 semesters) course consisting of a total of 1016 class and laboratory hours. Classes operate 5 days a week, Monday through Friday, on the average of 6 hours per day. The course is planned to give students an adequate orientation to the duties of the dental assistant from general office work to the technical phases of chairside assisting, laboratory techniques and radiology. Related instruction runs concurrently with the practical instruction throughout the course. Students have field experience in selected dental offices, Madison Health Dept. dental clinics for school children, and Dane County dental clinics, Marquette University School of Dentistry, commencing with the latter part of the first semester.

**Overview of Areas of Instruction**

**Area I. Orientation and Professional Conduct - approximately 180 hours.**

- A. Professional orientation and conduct:  
Including dental specialties, auxiliary services and personnel; knowledge, understanding, and practice of the codes of ethics of the American Dental Assistant's Association, the American Dental Hygienists Association, and the American Dental Association; professional relations with associates and patients, proper dress and manner in the professional office, personal hygiene and grooming; dental assistant's national and local organizations; implication of state practice acts and certification program for dental assistants
- B. English and Speech (Communication Skills)
- C. Psychology of Human Relations

**Area II. Dental Theory - Approximately 216 hours**

- A. General Anatomy, Oral Anatomy, Dental Anatomy, and Physiology,
- B. Oral Hygiene - Basic information on methods of maintaining effective oral hygiene including the role of the dental assistant in dental health instruction to patients
- C. Oral Pathology
  - 1. Dental caries
  - 2. Traumatic Injury
  - 3. Disease processes in general
  - 4. Principal causes and effects of oral inflammation, infection, and degeneration
- D. Drugs and their uses - A general knowledge of drugs, anesthetics and their uses, and the legal implications as applied to dentistry
- E. Diet and Nutrition - basic information regarding the relation of diet to general and dental health
- F. First Aid and emergencies



Area III. Dental Office secretarial information for dental assistants (management and procedures) - approximately 90 hours

- A. Dental assisting typewriting (include office letters)
- B. Office Management
  - 1. Record keeping, filing, bookkeeping
  - 2. Appointment scheduling
  - 3. Telephone procedure
  - 4. Supply purchase
  - 5. Storage and inventory
- C. Routine care of instruments and equipment

Area IV. Dental Assisting - approximately 530 hours

- A. Sterilization - Basic principles of common disease transmission and their implications for sterilization of dental instruments and materials; operation, maintenance and use of various types of sterilization equipment; knowledge of selection of method
- B. Radiography - Principles of use and protection as related to dental diagnostic equipment; exposure, processing, and mounting of dental x-ray films
- C. Chairside Assisting - Observation and experience in the identification and preparation of instruments and materials used in routine dental procedures; methods of passing and receiving instruments and the preparation of basic dental set-ups to assist the dentist in carrying out all dental procedures.
- D. Laboratory Procedures - Knowledge of the properties of and experience in the use of products used in fabricating dental prosthesis; preparation and trimming of models and casts; investment, casting, and polishing of gold inlays and crowns; adapting base plates and wax rims; handling of prescriptions and cases for commercial laboratory processing.

Area I	180 hours
Area II	216 hours
Area III	90 hours
Area IV	530 hours
Total	1016 hours

Curriculum Balance: 33.4 percent classroom (Didactic)  
66.6 percent laboratory and clinical.

The program includes lectures, demonstrations, and return practice under qualified instructors in well equipped classrooms, laboratories, and operatories at the Madison Vocational, Technical and Adult Schools and at the affiliating dental clinics, private dental offices, and cooperating institutions.

### CURRICULUM FOR DENTAL ASSISTING

First Semester		Credit Hours
730.1	English -----	3
731.1	Dental Office Management I -----	2
732.2	Professional Orientation -----	2
733.1	Dental Lab Procedures I -----	5
734.1	Dental Theory I -----	3
735.1	Dental Assisting -----	5
732.3	Perspectives in Personal Development-----	2
TOTAL		22

Second Semester		
730.2	English -----	3
731.2	Dental Office Management II -----	2
732.2	Psychology of Human Relations -----	1
733.2	Dental Lab Procedures II -----	5
734.2	Dental Theory II -----	3
735.2	Dental Assisting including fieldwork-----	8
TOTAL		22



71

STUDENT

MADISON ADDRESS

TITLE: Dental Assisting		YEAR: 1964		SEMESTER: I		DATE: September 14, 1964			
MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY	
1	7:36 8:26								
2	8:30 9:20	Dental Assisting Rm. 248 Fiedler & Masik	Dental Lab. Pro. Masik	Dental Assisting " "	Dental Lab. Pro.(A)	Dental Assisting (B)	Dental Lab. Pro. (B)	Dental Assisting (A)	
3	9:24 10:14	Personal Development Mrs. Nelson	Dental Lab. Pro.(B)	" "	" "	" "	" "	" "	
	10:14 10:29								
4	10:29 11:19	Dental Lab. Pro.(A)	"	" "	Professional Orientation Fiedler Rm. 248		Personal Development Mrs. Nelson		
5	11:23 12:13	"	Study	" "	Study		Dental Assisting Lecture Fiedler & Masik		
6	12:13 1:07 Lunch								
7	1:11 2:01	Dental Theory Fiedler and Masik Rm. 248	Professional Orientation Fiedler	Dental Theory Fiedler and Masik Rm. 248	Dental Theory Fiedler & Masik Rm. 248		Study		
8	2:05 2:55	Typing D.A. 430 Fahey	Office Management Robinson Sec. I.	Dental Lab. Pro. Masik - Rm. 248	Office Management Robinson Sec. II.		D.A. Typing Fahey 436		
9	2:59 3:49	English Rm. 248	English Rm. 248	Study	English Rm. 248		Study		
	3:49 5:00								

The entire class will meet unless indicated.

Subject Number: (Unassigned)

Subject Title: English

Class Periods Per Week: 3 ----- for 2 Semesters

Credit Hours: 3 ----- Each Semester (Total of 6)

Subject Description:

This course is designed to improve the student's speaking and writing skills and to help him grow in language power through the development of correct habits of careful, forceful expression. The course material covering the basic skills--reading, speaking, and writing--has been correlated so that the methods used in these areas are complementary parts of the communication process.

Objectives:

To improve the student's speaking and writing skills, and to help him increase his language power through the development of the basic skills of reading, speaking, writing, and analyzing. A review of the mechanics of grammar and punctuation are followed by a review of spelling and resource material available in the libraries. Contemporary short stories, essays, books, magazines, are source materials for oral and written assignments. Problems in note taking, outlining, summarizing, analyzing, and reporting are considered.

Units:

- I. Introduction & Review
  - A. History of Language (3)
    - Essay on words as records of man
  - B. Semantics (3)
    - Essay on meaning and "meaningless" of words
  - C. Grammar Review (12)
    - 3 Essays - 1. Stress simple sentence and paragraph structure
    - 2. Stress subordination
    - 3. Stress transition and unity
  
- II. Reading - Developmental, and Writing - Essay
  - A. Developmental Reading (9)
    - Short essays on reading
  - B. Forms on Exposition (9)
    - 1. Narrative 2. Informative 3. Persuasive 4. Critical
    - Continue reading practice

Subject number - unassigned con't.

Units: con't.

- III. Mechanics of Correspondence
  - A. Writing Letters (12)
  - B. Mechanics (5)
  - C. Read a novel for individualized book report (1)
  
- IV. Reading
  - A. Short Stories (3)  
Related short analyses
  - B. Essays (3)  
Related imitations
  - C. Biography (3)  
Biography and Autobiography (brief)
  - D. Poetry (3)  
Essay showing how a poem can and cannot be expressed in an essay.
  - E. Reading Technique Review (2)
  - F. Letter Review (2)
  
- V. Research Tools
  - A. Basic research tools, library, other sources (3)  
Look up materials in own area
  - B. Research Paper (12)  
In own field  
Class practice in mechanics
  - C. A Novel (3)  
Assigned early, a week spent on individualized book report with individual reportage.
  
- VI. Speech
  - A. Informal (3)
  - B. Parliamentary procedure (3)
  - C. Outlining (3)
  - D. Speeches of Information and Persuasion (9)

**Subject # 731.2****Subject Title: Dental Office Management****Class Periods per week: 2****Credit Hours: 2****Subject Description:**

Basic office principles and procedures are explored and then related to their application in a dental office.

**Objectives:**

1. To acquaint the student with the variety of office procedures used in dental offices;
2. To develop proficiency in the use of both alphabetical and numerical filing;
3. To develop understanding of and proficiency in the use of various banking procedures;
4. To help the student learn how to maintain an efficient appointment book;
5. Ordering, inventory, care and storage of dental supplies.

**Units:**

- I. General office Management (taught by Business Education staff).
  - A. Filing Systems
    1. Alphabetical
    2. Numerical
  - B. Financial Records
    1. Credit References
    2. Deposits, checks and reconciliation of bank statements.
    3. Preparation necessary for auditor and tax consultant.
    4. Expense distribution; monthly summary sheet.

731.2 con't.

- II. Dental office Management (taught by Dental Assisting staff)
  - A. Maintaining an efficient flow of work
    - 1. Appointment book
    - 2. Adjustment of appointments
    - 3. Recall systems
  - B. Maintaining an attractive, efficient office.
    - 1. Cleanliness, lighting, heating, and ventilation.
    - 2. Receiving, greeting, introducing and dismissing patients.
  - C. Supplies
    - 1. Maximum and minimum quantity.
    - 2. Purchasing
    - 3. Storage and care of expendible, non-expendible, and sterile supplies.
    - 4. Ordering and receiving supplies and equipment.
    - 5. Methods for taking & maintaining an inventory.
  - D. Dental Service Corporation
    - 1. Definition and terminology
    - 2. Implication for business management of dental office.

III. Dental Terminology (Integrated throughout entire course)

Texts:

- 1. Typing text
- 2. Brauer, John C. and Richardson, Richard E.  
The Dental Assistant, McGraw-Hill Book Company,  
Third Edition, 1964.

References:

Peterson, Shailer. The Dentist and His Assistant.  
The C. V. Mosby Co., St. Louis, 1961.

Educational Aids:

- 1. Selected pamphlets.
- 2. Sample copies of forms, cards, records, appointment books and account books.

**Subject # 731.3****Subject Title: Dental Assistant Typewriting****Class Period Per Week: 2****Credit Hours: 1****Subject Description:**

Application of the basic skills are studied including: centering and composing at the typewriter, typing of letters and postal cards, typing manuscripts and tabulated reports.

**Objectives:**

- i. To review the basic skills of typewriting and study the various styles of business letters.
2. To learn to type tabulated reports and tables with headings and simple business forms.

**Units:**

- I. Business Letters
  - A. Reconstructing basic skills
    1. Review centering
    2. Word division
    3. Erasing
  - B. Typing letters in block and modified block
    1. Letter placement
    2. Three-line address
    3. Titles in closing lines
    4. Reference initials
    5. Addressing small envelope
    6. Titles in the address
  - C. Typing letters in modified block style with indented paragraphs.
  - D. Typing letters with special parts
- II. Building speed with control



Subject # 731.3-(con't.)

III. Special Communication forms

- A. Typing Telegrams
- B. Postal cards
- C. Index cards
- D. Interoffice correspondence

IV. Typing reports and papers

V. Tabulated reports and simple business forms

- A. Planning and Typing Tables
- B. Typing letters with tabulated reports
- C. Typing simple business forms
  - 1. Invoices
  - 2. Credit memoranda
  - 3. Statements
  - 4. Purchase order
  - 5. Window envelopes
  - 6. Voucher check
  - 7. Promissory note

Text:

None

References:

- Dictionary
- Reference manual
- Atlas
- City Directory
- Telephone book
- Style manual for manuscripts

21

Subject # 732.1

Subject Title: Professional Orientation

Class Periods per week: 2

Credit Hours: 2

Subject Description:

This course is designed to orient the dental assisting student to this school, to the other medical occupations, and to her role and responsibility as a dental assistant in relation to the other members of the dental team.

Objectives:

1. To provide an overall view of dentistry and dental assisting;
2. To develop understanding of the roles of the various members of the dental team;
3. To develop an appreciation of the ethics of dental assisting;
4. To acquaint the student with an historical background of the development of dentistry.

Units:

- I. Health Occupations
  - A. Their place in the health field.
  - B. Their place in this school.
- II. Developing a responsibility for one's own self.
  - A. Efficient use of time
  - B. Study Habits
  - C. Use of library
  - D. Effective working & living habits
  - E. How to wear a uniform.
  - F. Qualifications of a dental assistant.
    1. Academic
    2. Personal
- III. The Dental Health Team
  - A. Members
    1. Education and training
    2. Responsibilities
    3. Limitations
  - B. Demand and Supply
  - C. Areas of dentistry
- IV. Ethics and Professional Responsibilities
  - A. A.D.A.
  - B. ADAA
  - C. Creeds and Codes
- V. History of Dentistry

- 2 -

Subject #732.1 (con't.)

Text:

Brauer, John C. and Richardson, Richard  
The Dental Assistant.

References:

Code of Ethics - American Dental Association  
Code of Ethics - American Dental Assistants Association

Educational Aids:

Selected films and filmstrips.  
Guest lecturers - dentists and officers of dental  
assistant's association.  
Professional journals

MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants

Subject # 732.2

Subject Title: Perspectives in Personal Development

Class Periods Per Week: 2 (for one semester)

Credit Hours: 2

Subject Description:

This is a unit of the Human Relations course. It is taught by home economics staff members and is an experimental program.

Objectives:

1. To help students gain maturity, personality, poise.
2. To establish standards of being well-dressed and well-groomed.
3. To appreciate the importance of sound health- physical, mental, emotional.
4. To gain an understanding of characteristics needed for that first job, for future advancements.

Units:

- I. What is Maturity
  - A. Characteristics of a mature person
  - B. Getting along with others
  - C. Thoughtfulness of others versus self-centeredness
  - D. Choosing companions, relationships
  
- II. Developing your Personality
  - A. Establishing values
  - B. Be yourself- individualism vs. conformity
  - C. Analyzing personality
  - D. Poise, self-confidence
  - E. Hobbies and interests
  - F. Sense of humor
  
- III. Etiquette
 

At home or dormitory, at the phone, in public places, eating out, teas, receptions, weddings

- IV. Choosing your Clothes
  - A. Appropriateness for occasion
  - B. Selection of ready-made clothes
  - C. Care of clothing
  - D. Accessories
  
- V. Your Health - the Food You Eat
  - A. Health and daily meals
  - B. Basic 4 food groups
  - C. Weight problems
  - D. Food fads
  
- VI. Grooming, Looking Your Best
  - A. Cleanliness
  - B. Care of skin, hair, hands
  - C. Make-up
  - D. Posture
  - E. Sleep and good health
  - F. Exercise
  
- VII. Managing Your Life
  - A. Planning personal time schedules, values, relaxation
  - B. Budgeting your money
  - C. Spending your energy
  
- VIII. That Important Job Interview

Subject # 733.1Subject Title: Dental Laboratory ProceduresClass Periods per Week: Lectures, demonstrations and laboratory practice, 6 hours.Credit Hours: 4 (3?)Subject Description:

The major portion of this course is concerned with oral anatomy, including the teeth and surrounding structures. Also included are the technics of pouring and trimming a plaster model.

Objectives:

1. To acquaint the student with the development, eruption, arrangement, function, form, and characteristics of teeth and their surrounding structures;
2. To teach the student normal morphology of teeth and to help her become aware of the abnormal;
3. To develop dexterity in holding and using hand instruments over a period of time;
4. To become acquainted with the consistency and properties of wax;
5. To develop spatial concepts.

Units:

- I. Location, function and terminology involved in structures surrounding teeth.
  - a. Bones of oral cavity.
  - b. Gingiva and supporting structures.
  - c. Tongue and taste organs.
  - d. Palate, throat, salivary glands and tonsils.
- II. Development, eruption, arrangement, functions, form and characteristics of teeth.
  - A. Permanent dentition
  - B. Deciduous dentition
  - C. Life Cycle and eruption patterns
  - D. Incisors
  - E. First bicuspid
  - F. Second bicuspid
  - G. First permanent molars
  - H. Second permanent molars
  - I. Third permanent molars
  - J. Occlusion
  - K. Abrasion, erosion, and attrition.



(2)

Subject # 733.1 (con't.)

Texts:

1. Wheeler, R. Tooth Form Drawings and Carving.  
W. B. Saunders Co., Philadelphia.

References:

1. Brauer, John C. and Richardson, Richard, The Dental Assistant, McGraw - Hill Book Co., New York, Third Edition, 1964.
2. Naval Training Course  
Dental Technician, General, NAVPERS 10696-B
3. Massler, Maury and Schauer, Isaac, Atlas of the Mouth in Health and Disease.  
American Dental Association, Chicago, Second Edition, 1958.

Educational Aids:

1. Selected slides, films, and filmstrips.
2. Millemeter paper.
3. Ivory soap blocks, green wax blocks, Boley gauge, and selected knives and carving instruments.

Subject # 733.2

Subject Title. Dental Laboratory Procedures

Credit Hours: 4

Subject Description:

Through demonstration and practice, to acquaint the student with the properties of dental materials; the relationship between the mode of manipulation and the properties obtained; and the technics used in general dental practices which could be performed by a dental assistant.

Objectives:

- 1. To acquaint the student with properties and manipulation technics of impression materials;
- 2. To develop proficiency in all the steps used in investing, casting and polishing gold inlays;
- 3. To develop skill in beading and boxing impressions; pouring and trimming casts and models in plaster and in stone; construction of individual impression trays in resin.

Units:

- I. Properties and manipulation of impression materials.
  - A. Compound
  - B. Hydrocolloid
- II. Properties and procedures for mixing plaster of paris and stone.
- III. Casts and Models
  - A. Beading and boxing impressions
  - B. Pouring model or cast
  - C. Trimming model or cast.
- IV. Construction of resin impression trays.
- V. Base plates and occlusal rims.
- VI. Indirect casting technic
  - A. Use of rubber and hydrocolloid impression materials.
  - B. Use of Vacutral
  - C. Taking wax patterns in metal die.
  - D. Investing wax pattern.
- VII. Direct Casting Technic
  - A. Preparation and investment of wax pattern.
  - B. Casting procedures.
- VIII. Making stone and amalgam dies.

733.2 (con't.)

Texts:

1. Wheeler, R. Tooth Form Drawings and Carving. W. B. Saunders Co., Philadelphia.
2. Laboratory manual, mimeographed instructions.
3. Brauer, John C. and Richardson, Richard, The Dental Assistant, Third edition, McGraw-Hill Book Co. New York, 1964.

References:

1. Brauer, John C. and Richardson, Richard, The Dental Assistant, McGraw - Hill Book Co., New York, Third Edition, 1964.
2. Naval Training Course Dental Technician, General, NAVPERS 10696-B
3. Massler, Maury and Schauer, Isaac, Atlas of the Mouth in Health and Disease. American Dental Association, Chicago, Second Edition, 1958.

Educational Aids:

1. Selected slides, films, and filmstrips.
2. Millemeter paper.
3. Impression, model, and casting materials and appropriate laboratory equipment.
4. Ivory soap blocks, green wax blocks, Boley gauge, and selected knives and carving instruments.

MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants

Subject # 734.1

Subject Title: Dental Theory

Class Periods per week: 3

Credit Hours: 3

Subject Description:

Content of this course includes a study of body structures, functions and interrelationships; normal nutrition; an overview of dental diseases and their prevention; and the relationship of microorganisms to disease.

Objectives:

To assist the student in developing some understanding of:

1. The functions of body structures, operations and interrelations;
2. Nutrition as it relates to the well being of a person;
3. Prevention and control of dental diseases; and
4. The relationship of microorganisms to disease.

Units:

- I. General Anatomy - An overview of body structure and function.
  - A. Skeletal System
  - B. Muscles & Nerves
  - C. Heart
  - D. Lungs and Resperatory System
  - E. Skin and Sense Organs
  - F. Digestive System
  - G. Circulatory System
  
- II. Common Dental Diseases
  - A. Dental Caries
    1. Definition
    2. Etiology
    3. Preventive measures
  - B. Periodontal Diseases
    1. Normal gingival tissue
    2. Definition of gingivitis
    3. Contributory factors
    4. Preventive measures

Units: (continued)

**III. Microbiology**

- A. Definition and historical background;
- B. Basic structure and functions of cells;
- C. Yeasts and Molds;
- D. Morphology of Microorganisms;
- E. Sequence of development of the germ theory;
- F. Relationships and differences between health and disease;
- G. Infectious diseases;
- H. Relationship between microorganisms and oral infections;
- I. Sterilization and its importance in a dental office.

**Texts: Brauer and Richardson**  
**The Wonderful Human Machine.**  
**The Dentist and His Assistant Peterson**

**Educational Aids:**

- 1. Selected slides, films, and filmstrips.
- 2. Demonstration in the classroom.
- 3. Pamphlets and leaflets.

MADISON VOCATIONAL, TECHNICAL & ADULT SCHOOLS  
School of Dental Assistants

Subject # 734.1

Subject Title: Dental Theory (Included as a part of Dental Theory)

Class Periods Per Week: (Total of 6 hours)

Credit Hours: -

Subject Description:

This is one unit of the Dental Theory Course. The classes consist of an elementary study of gross structure and function of the human body with special emphasis being given to the inter-relationship of systems. Abnormal and disease conditions the student may encounter as a dental assistant are briefly discussed in each unit contrasting the abnormal with the normal.

Units:

- I. The Skeletal System
  - A. General description
  - B. Differences in skeleton of child and adult
  - C. Composition and development of bone
  - D. Function
  - E. Divisions
    - Identification of bones
  - F. Proper nutrition
  - G. Disorders of bone
    1. Fractures
    2. Osteomyelitis
    3. Pott's disease
    4. Rickets
- II. The Muscular System
  - A. General description
  - B. Classification
  - C. Function
  - D. Individual Muscles and groups
  - E. Muscle disorders
    1. Strains and sprains
    2. Muscle atrophy
    3. Muscle hypertrophy



Subject # 734.1 (con't.)

Units: (con't.)

**III. The Nervous System**

- A. General description
- B. Structure
  - 1. Central Nervous System  
Functions
  - 2. Peripheral Nervous System  
Functions
- C. Disorders
  - 1. Brain
    - a. Stroke (CVA)
    - b. Epilepsy
    - c. Tumors
    - d. Aphasia
  - 2. Cranial Nerves
    - a. Blindness
    - b. Loss of hearing
  - 3. Spinal Nerves
    - a. Neuritis
    - b. Sciatica

**IV. The Circulatory System**

- A. The heart
  - 1. Anatomy
  - 2. Physiology
  - 3. Disorders
    - a. Congenital heart disease
    - b. Rheumatic fever
    - c. Coronary heart disease
  - 4. Prevention of heart disease
- B. Blood Vessels and Blood Circulation
  - 1. Classification of vessels
  - 2. Circulation
  - 3. Blood Pressure
    - a. General description
    - b. Abnormal conditions
      - 1. Hypertension
      - 2. Hypotension
  - 4. Pulse  
General Description

Subject # 734.1 (con't.)

Units (con't.)

- 5. Disorders involving the blood vessels
  - a. Aneurysm
  - b. Arteriosclerosis
  - c. Thrombus
  - d. Hemorrhage
  - e. Shock
  - f. Varicose Veins
  - g. Phlebitis
- V. The Respiratory System
  - A. Organs
  - B. Physiology of respiration
  - C. Disorders
    - 1. Nosebleed (epistaxis)
    - 2. Common cold
    - 3. Pneumonia
    - 4. Tuberculosis
- VI. The Skin
  - A. Structure
  - B. Function
  - C. Skin diseases
    - 1. Dermatitis
    - 2. Sunburn
    - 3. Acne
- VII. The Sense Organs
  - A. The Ear
    - 1. Structure and function
    - 2. Disorders
      - a. Otitis media
      - b. Deafness
  - B. The Eye
    - 1. Structure and function
      - a. Hyperopia
      - b. Myopia
      - c. Astigmatism
      - d. Strabismus
      - e. Cataract
      - f. Glaucoma

Subject # 734.1 (con't.)

VIII. The Digestive System

A. Organs of digestion

1. Alimentary canal
2. Accessory organs

B. Physiology of digestion, absorption, metabolism

C. Disorders

1. Stomach cancer
2. Peptic ulcer
3. Gastritis and enteritis
4. Constipation
5. Hepatitis
6. Cirrhosis
7. Cholecystitis
8. Cholelithiasis

Text:

The Wonderful Human Machine,  
American Medical Association, Chicago, 1961.

References:

Taber, Clarence W., Taber's Cyclopedic  
Medical Dictionary,  
F.A. Davis Company, Philadelphia, 1962.

Turner, C.E., Personal and Community Health,  
The C.V. Mosby Company, St. Louis, 1963.

**Subject # 734.2**

**Subject Title: Dental Theory**

**Class Periods per week: 3**

**Credit Hours: 3**

**Subject Description:**

Content of this course provides an overview and an introduction to the terminology of pathological conditions found in the oral cavity; endodontics; orthodontics; periodontics; exodontics; and anesthesia.

**Objectives:**

To help the student achieve some measure of understanding of the scope of and terminology used in oral pathology, as well as in some of the specialty areas of dentistry.

**Units:**

- I. Oral Pathology
  - A. Inflammation, repair and degeneration.
  - B. Developmental and congenital anomalies.
  - C. Pulpitis, periapical abscesses, fistula, parulis and osteomyelitis.
  - D. Gingivitis, periodontitis, and periodontosis.
  - E. Oral lesions.
  
- II. Endodontics
  
- III. Orthodontics
  
- IV. Periodontics
  
- V. Exodontics
  
- VI. Anesthesia

**Texts: Brauer and Richardson**

**Educational Aids:**

- 1. Selected films, slides, and filmstrip's
- 2. Pamphlets and leaflets.

36.  
Subject # 734.3

Subject Title - Basic Nutrition - (included as a part of the Dental Theory course).

Class Periods: - 1 per week for 7 weeks.

Subject Description:

Basic information is presented regarding the relation of diet to general and dental health. Emphasis is on normal nutrition.

Objectives:

1. To develop in the student dental assistant an awareness of nutrition with an understanding of its role in preserving the general and dental health of all people.
2. To aid the student dental assistant to acquire a working knowledge of the facts and principles of basic nutrition that she may adapt these to her own food habits as well as those of her patients.

Units:

- I. Nutrition in relation to good health
- II. Nutrients - proteins, fats, carbohydrates
  - A. Use
  - B. Sources
  - C. Conditions caused by deficiency
- III. Energy Needs
  - A. Calories
  - B. Need for calories
  - C. Caloric value of nutrients
  - D. Daily energy requirements
- IV. Vitamins and Minerals
  - A. Uses
  - B. Sources
  - C. Conditions caused by deficiency
- V. Water and Cellulose
  - A. Importance
  - B. Sources

Subject # 734.3 (con't.)

VI. Meal Planning

- A. Aims
- B. Considerations
- C. Basis of meal plan
- D. Hints for good meal planning
- E. Changing family habits

VII. Food Economics

- A. Purchasing
- B. Storing
- C. Cooking

VIII. Overweight and Underweight

- A. Definition of Terms
- B. Food fads and fallacies
- C. Hazards of overweight
- D. Causes of overweight
- E. Goals for reduction of weight
- F. Methods of weight reduction
- G. Underweight - causes and control

Text:

Brauer, John C. The Dental Assistant

References:

Peyton, Alice B. Practical Nutrition  
Pamphlets (pertaining to nutrition & health)



Subject # 734.4

Subject Title - First Aid and Emergencies (included as a part of the Dental Theory course).

Class Periods: - 1 per week for 8 weeks

Subject Description:

Basic information is presented regarding first aid and emergency care with application to situations in a dental office.

Objective:

To aid the student dental assistant to acquire a working knowledge of first aid measures that she may institute these measures when called on in an emergency.

Units:

- I. General procedures to follow in an emergency situation
- II. Hemorrhage - clinical signs, symptoms, treatment
  - A. Arterial hemorrhage
  - B. Venous hemorrhage
- III. Bleeding - emergency measures for control
  - A. Nose
  - B. Tooth Socket
- IV. Shock
  - A. Definition and causes
  - B. Clinical signs and symptoms
  - C. First aid treatment
- V. Respiratory failure and asphyxia
  - A. Definition and causes
  - B. Clinical signs
  - C. First aid treatment
  - D. Demonstration and return demonstration of "Rescue Breathing"
- VI. Cardiac Failure
  - A. Clinical signs & symptoms
  - B. Preventive measures
  - C. First aid treatment

Subject # 734.4-(con't.)

VII. Convulsions in children

VIII. Epileptic Convulsions

IX. Foreign Bodies - symptoms & indications

A. In the throat or windpipe

B. In the eye

C. First aid treatment

X. Falls and Resulting injuries

A. Recognition and treatment

B. Reporting

XI. Miscellaneous Emergencies - Recognition & treatment

A. Fainting

B. Procaine allergies

C. Hypertension

D. Insulin Shock

Text:

Brauer - The Dental Assistant

Educational Aids:

- 1. Selected pamphlets
- 2. Selected films

Subject # 734.5

Subject Title: Pharmacology (included as a part of the dental theory course)

Class Periods: Total of 6 periods

Subject Description:

Therapeutic terms; drug actions; dosage; toxicology; and the application of drugs commonly used in the dental office are studied.

Objective:

To aid the student dental assistant to acquire a working knowledge of drugs and medications used in various situations in the dental office.

Units:

- I. General considerations in the administration of drugs.
- II. Rules to follow when giving drugs.
- III. Methods of administering drugs.
- IV. Conditions modifying action of drugs.
- V. Weights and measures in drug preparation.
- VI. Drugs and preparations for office use.
- VII. Legal aspects pertaining to drug administration.

Text:

Brauer - The Dental Assistant

Reference:

Accepted Dental Remedies - Latest edition - Council on Dental Therapeutics - A. D. A.

Subject # 735.1

Subject Title: Dental Assisting (Semester 1)

Class Periods per week: Lectures, demonstrations and laboratory practice - 10 hours.

Credit Hours: 4

Subject Description:

Included in this course are the basic principles involved in assisting the dentist in the operatory. The student is helped to develop proficiency in identifying the names and uses of instruments, equipment, and materials; to anticipate their use by the dentist; and to assist in many ways to conserve the dentist's time and contribute to the patient's comfort.

Aim:

To help the student understand underlying principles and to develop basic skills in assisting with all aspects of dental care provided for the patient in the dental operatory.

Objectives:

1. To develop proficiency in the identification care and routine maintenance of all equipment usually found in a dental operatory;
2. To acquire a knowledge of and proficiency in preparing all restorative materials used in dentistry;
3. To develop skill in charting all conditions found in the oral cavity, as dictated by the examiners;
4. To acquire understanding and proficiency in storing, processing, and mounting x-rays;
5. To introduce to the student some of the hazards of radiography and the protective measures important in dental radiography.

**Units:**

- I. Introduction to the course**
  - A. Objectives**
  - B. Scope**
  
- II. The Modern Dental Office**
  - A. General Appearance of a Dental Office**
    1. Importance of order, neatness, cleanliness, and pleasing decor.
    2. Ways in which an assistant can contribute to the general appearance of the office.
  
  - B. Usual plan of a dental office.**
    1. Reception room.
      - a. Lighting, arrangement, decor, reading material, children's area.
      - b. Daily and periodic maintenance and housekeeping duties.
    2. Business office
      - a. Purpose, location, general arrangement.
      - b. Daily housekeeping and maintenance.
    3. Operatories
      - a. Use and maintenance of equipment (chair, unit, evacuating machine, engine, engine cord, handpieces, etc.)
      - b. Daily and periodic maintenance and housekeeping duties.
    4. Laboratory
      - a. Care and maintenance of equipment (model trimmer, ovens, counter top, burners, casting machine, etc.)
      - b. Daily and periodic housekeeping duties.
  
- III. Receiving patients**
  - A. Appointments**
  - B. Patient history (conversation- Have them record)**
  - C. Seating patient**

- IV. Identification of all hand instruments used in operatory.
  - A. Kinds and general classification.
  - B. General description of hand instruments.
  - C. Dental mirrors
  - D. Explorers
  - E. Cotton pliers
  - F. Prophylactic instruments
  - G. Cavity preparation (instruments used for)
  - H. Non-cutting instruments
  - I. Surgical Instruments (Dental)
  
- V. General Overview of the Assistant's role in Cavity Preparations.
  - A. Classifications of Cavities
  - B. Identification of cavity preparations by surfaces.
  - C. Steps used by the dentist in preparing cavities.
  - D. Use of air and water in cavity preparation.
  - E. Assistant's role in cavity preparation.
  
- VI. Rotating Cutting Instruments
  - A. General description
  - B. Identification of shanks and their use with appropriate handpieces.
  - C. Identification of disks, burs, and stones.
  
- VII. Tray set-ups
  - A. Basic
  - B. Examination
  - C. Prophylaxis
  - D. Rubber Dam
  - E. Cavity Preparation
  - F. Placing of Restorations
  - G. Removal of teeth
  - H. Impressions



### VIII. Roentgenology

- A. Definition
- B. Historical Background
- C. Characteristics and properties of roentgen rays.
- D. Production of roentgen rays.
- E. Production control factors
- F. X-radiation
- G. Dangers and protection
- H. Characteristics of dental x-ray films.
- I. Darkroom facilities - use, care, and maintenance.
- J. Steps used to process dental x-ray films.
- K. Mounting of exposed films.
- L. Exposing bite-wing films.

### IX. Patient Records

- A. Definition
- B. Purpose and importance of
- C. Component parts
  - 1. Identifying information
  - 2. Dental habits
  - 3. General health record
  - 4. Description of dental restorations
  - 5. Description of dental needs.
  - 6. Charting
  - 7. X-rays

### X. Composition, preparation, and use of Restorative Materials.

- A. Amalgam
- B. Synthetics
- C. Cements
- D. Bases
- E. Periodontal packs

735.1 (Semester 1) con't.

Text:

Brauer, John C. and Richardson, Richard E.  
The Dental Assistant, Third Edition, McGraw-Hill Book Company, New York, 1964.

References:

Peterson, Shailer, The Dentist and His Assistant,  
The C. V. Mosby Company, St. Louis, 1961.

X-Rays in Dentistry: A Manual of Procedure for  
Dental Radiography.  
Eastman Kodak Co., X-Ray Division, Rochester, N. Y.

Educational Aids:

Demonstrations in classroom and laboratory.  
Selected films, pamphlets and guest lecturers,  
dentists and detail men from dental companies.  
Observation in city and county dental clinics.

Subject # 735.2

Subject Title: Dental Assisting (Semester 2)

Class Periods per week: Lectures, demonstrations and laboratory practice - 10 hour

Credit Hours: 4

Subject Description:

This course is a continuation of 735.1 and emphasis on the dental assistant's role in the dental operatory is continued. During the second semester, the student is helped to develop understanding of and proficiency in all steps involved in the production of dental roentgenograms. An opportunity is provided for students to learn about and practice good telephone manners and technics.

Aim: Same as Course # 735.1

Objectives:

1. To acquire an understanding of the factors and develop proficiencies involved in all steps necessary to produce dental roentgenograms of a high quality.
2. To develop an appreciation for good telephone manners and technics.

Units:

- I. Placing,, exposing, processing and mounting periapical films in maxillary areas:
  - a. For Mary Belle
  - b. For patient
- II. Placing, exposing, processing and mounting periapical films in mandibular areas:
  - a. For Mary Belle
  - b. For patient
- III. Development of good telephone technics.
  - a. Importance of courtesy, tone of voice, accuracy and communication over the telephone.
  - b. Practice with teletrainer and tape recorder.

- 2 -

735.2 (Semester 2) con't.

Text:

Brauer, John C. and Richardson, Richard E.  
The Dental Assistant, Third Edition,  
McGraw - Hill Book Company, New York, 1964.

References:

Peterson, Shailer, The Dentist and His Assistant,  
The C.V. Mosby Co., St. Louis, 1961.

X-rays in Dentistry: A Manual of Procedure for  
Dental Radiography. Eastman

Exposure and Processing chart for Kodak Dental  
X-Ray Films.  
Eastman Kodak Co., Rochester, N.Y.

Educational Aids:

1. Four weeks of affiliation in two different private dental offices.
2. Selected films, filmstrips, and pamphlets.
3. Use of teletrainer and tape recorders.
4. Guest lecturers (dentists and detail men from dental supply houses).
5. Demonstrations in classroom and laboratory.

MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants

Field Experience - Instructions

We have prepared the following information for you to help make the assignment of a dental assisting student to your office as meaningful as possible. Following is a list of skills and duties in which the student has had instruction and practice. After she has had an opportunity to observe your particular routine, you can expect her to be able to:

1. Clean and polish equipment as part of daily maintenance.
2. Clean operatory between patients.
3. Scrub and sterilize instruments.
4. Assist with housekeeping duties in laboratory, dark room, supply room, etc.
5. Prepare laundry (counting, sorting, etc.)
6. Prepare trays
7. Develop and mount x-rays.
8. Clean and lubricate handpieces.
9. Put instruments away.
10. Clean and sterilize burs.
11. Place simple telephone calls (such as reminding patients of appointments, etc.).
12. Prepare restorative materials, such as cements, synthetics, bases, amalgam, zinc oxide and eugenol, and/or periodontal packs.
13. Prepare a plaster model.
14. Greet patients and seat them in the operatory.

**MADISON VOCATIONAL, TECHNICAL AND ADULT SCHOOLS  
School of Dental Assistants**

**New Experiences**

If possible, we would like dental assisting students to be introduced to the following new experiences while she is in your office:

1. Listen to monitor and discuss various types of telephone calls.
2. Maintenance of an appointment book.
3. Assist at the chair. She has had practice in the use of air, water, evacuating equipment, and handing instruments.
4. Observe all laboratory procedures.
5. Preparation of cases for a commercial laboratory.
6. Ordering and/or inventory of supplies.
7. Bookkeeping procedures.



**AFFILIATION ASSIGNMENT**  
**Dental Assistants**

Written assignment to be completed during two-week affiliation in a dental office. (First affiliation)

1. What types of sterilization and sanitizing methods are used in this office?
  
  
  
  
  
  
  
  
  
  
2. Are any disposable items used in the office?
  - a. Tray covers
  - b. Head rest covers
  - c. Bibs
  - d. Cups
  - e. Needles
  - f. Other
  
  
  
  
  
  
  
  
  
  
3. Describe the recall system that is used in this office.
  
  
  
  
  
  
  
  
  
  
4. What type of permanent record card is kept for each patient? (Bring sample card if possible).
  
  
  
  
  
  
  
  
  
  
5. What method of charting is used in this office? (How teeth are identified by number or letter, etc.; how different types of restorations, caries, etc. are indicated).

## FIELD EXPERIENCE - INSTRUCTIONS

We have prepared the following information for you to help make the second affiliation of a dental assisting student to your office as meaningful as possible. This student is nearing the end of her academic training and should be able to perform any tasks which you wish to assign to her. To help you to know the extent of her training, following is a suggested list of skills which she should be able to perform at your direction. This list is in addition to some of the more elementary tasks which we suggested with the first affiliation:

### I. Assist in the dental operatory

- a. Prepare patient and operatory for any type of dental service.
- b. Use air and water in the mouth, retract the cheek & tongue, as well as sponge and swab to keep field of operation clean & visible.
- c. Assemble an anesthetic syringe and select the appropriate size needle.
- d. Prepare any type of restorative material, bases, and/or impression materials. (amalgams, cements, synthetics, periodontal packs, hydrocolloid and alginate impression materials).
- e. Assemble matrix band & holder and/or hold celluloid matrix.
- f. Identify and place in handpiece any type of bur, disk, or stone.
- g. Identify and hand all instruments used in cavity preparations, placing and finishing restorations, extractions, and impressions.
- h. Assist with extractions;
  - 1. Retract cheek & tissue,
  - 2. Sponge & swab,
  - 3. Use mallet to assist with cutting of bone,
  - 4. Hand instruments.

### II. Assist with laboratory procedures

- a. Alginate Impressions
  - 1. Prepare impression material
  - 2. Fill impression tray
  - 3. Properly store or pour completed impression.
- b. Hydrocolloid
  - 1. Use of hydrocolloid conditioner
  - 2. Prepare impression tray
  - 3. Attach cooling mechanism
  - 4. Store and/or pour impression

**II. (con't.)**

- c. Assist with preparation and fabrication of inlays and crowns:
  - 1. Selection of copper band
  - 2. Preparation of inlay wax
  - 3. Placing sprue
  - 4. Preparing compound for impression
  - 5. Invest, cast, and polish inlays.
  
- d. Pour and trim plaster and stone models.

**III. X-Rays**

- a. Seat patient according to area to be x-rayed.
- b. Select appropriate film (periapical, bite wing, etc.).
- c. Expose radiographs
- d. Develop and mount films.

**IV. Patient Instruction**

- a. Demonstrate the appropriate method for toothbrushing as prescribed by dentist.
- b. Discuss normal nutrition as indicated by age of patient.
- c. Discuss the need for regular and routine dental care and advantage of recall system.

## AFFILIATION WITH DANE COUNTY HEALTH DEPARTMENT

Dental clinic experiences are provided by the Dane County Health Department, under the direction of a Pedodontist and a trained dental assistant, and is planned to provide the following opportunities to:

1. Observe the manner in which pre-school children are oriented to dental care by a skilled pedodontist;
2. Observe conferences between dentist, patient and parents, regarding preventive measures related to dental health;
3. Assist with seating patients, and preparing trays;
4. Assist with use of air, water, and evacuation for patient and dentist;
5. Mix amalgam and hand instruments to the dentist;
6. Clean operatory and sterilize instruments.

## **FIELD EXPERIENCE - MADISON HEALTH DEPARTMENT**

**Opportunity is provided by the Madison Health Department for observation of the clinical facilities used to provide dental care for children of school age. Students, under the direction of a dental assistant, are exposed to:**

- 1. Duties and responsibilities of a trained dental assistant in a clinical situation;**
- 2. The facilities in the city for providing dental care for marginal families;**
- 3. Special needs of and methods for providing dental care for young people of varying age levels;**
- 4. An opportunity to assist at the dental chair;**
- 5. The methods used for charting and record keeping in a dental clinic.**

## FIELD VISIT TO MARQUETTE UNIVERSITY

A visit to Marquette University, School of Dentistry, is provided to give the trainees experience, contact, observations, and impressions of the dental team and how the members work together.

Each dental assisting student is assigned to a dental hygiene student, and through a mutual exchange of ideas and information, they have an opportunity to learn of each other's functions, training and responsibilities. The dental assisting students are assigned to dental hygiene students for a prophylaxis and a complete tour of the building.

The students are assigned in small groups to the Departments of Exodontia, Radiography, and Pedodontics for observation and assisting.

Discussion and demonstrations by a Certified Dental Laboratory Technician covered some of the laboratory's responsibilities related to fabricating dental prosthesis. For example, students were able to see the many steps involved in completing both full and partial dentures.

Marquette's outstanding laboratory for research in dental materials is an attractive part of the tour. The director gave an excellent overview of the kinds of research being conducted at the present time.

A final session for group discussion, question answering, and general summary helped to relate each part of the day's activities to the whole picture. An evaluation by students and faculty rates the day's total activities at a high level.

### FIELD TRIP - CENTRAL COLONY

The purpose of this field trip is two-fold: (1) to help students become aware of the special needs of retarded children and (2) to acquaint students with special facilities available for retarded children.

Drs. Sterling and Harper, the two dentists on the staff, orient the students to the special needs of retarded children through a series of slides and discussion of various problems which can accompany the provisions of dental care for retarded children. Following this presentation, the dentists demonstrate the manner in which dental care can be given for the bed patient and the semi-ambulatory patient.

The students also are provided an interesting tour of the building and facilities with an opportunity to observe the children during play, rest, and supervised activity.



## FIELD TRIP - DENTAL SUPPLY HOUSE

Preceding the field trip, a detail man from the supply house met with the class to discuss the best ways in which to order supplies. He emphasized:

1. Knowing exactly what to order by number, name, mfg., shade, size, etc.
2. Learning to order economically by minimum and maximum quantities.
3. Helpful inventory records and procedures.

Students visited the dental supply house in small groups. They were impressed with the wide variety of products which gave added emphasis to the need to order accurately and completely.

An opportunity was provided for students to observe demonstrations of unusual pieces of equipment that are not available in the classroom.

## FIELD TRIP - COMMERCIAL DENTAL LABORATORY

The purpose of this field trip is to acquaint students with laboratory procedures commonly provided by commercial laboratories. Students were able to observe some of the final steps in fabrication of prostheses which take place outside the dental office.

The following areas of demonstration and discussion are included:

1. Preparing a case for the commercial laboratory.
2. Written orders or prescriptions.
3. Areas of responsibility.

## AFFILIATION IN PRIVATE DENTAL OFFICES

With the assistance of many members of the Dane County Dental Society, the dental assisting students have been provided an opportunity to spend a total of four weeks in private offices, two weeks in each of two offices. The dentists who have been willing to provide this experience for students have been most generous with their time and skills. The dentists are asked to evaluate students as they reacted to this experience. Their evaluations are helpful to the faculty in strengthening each student's training and in assessing the student's strengths and weaknesses.

These affiliations are a valuable part of the students' educational experiences and contribute immeasurably to the students understanding and practice of various skills.

APPENDIX

Madison Vocational, Technical and Adult Schools  
School of Dental Assistants  
Student Evaluation Form

Students' name \_\_\_\_\_

Dates: from \_\_\_\_\_ to \_\_\_\_\_ No. of days absent \_\_\_\_\_

Name of dental office \_\_\_\_\_ No. of times late \_\_\_\_\_

Indicate by checks and comments the term or terms which best describe the student.

1. Attitude and interest:

- \_\_\_\_\_ Understands well the position of the dental assistant
- \_\_\_\_\_ Enjoys work
- \_\_\_\_\_ Appears indifferent

2. Industry

- \_\_\_\_\_ Seeks additional tasks
- \_\_\_\_\_ Does minimum amount of work
- \_\_\_\_\_ Will do additional work if reminded

3. Organization

- \_\_\_\_\_ Has to be told repeatedly in detail what to do.
- \_\_\_\_\_ Organizes with minimum assistance.
- \_\_\_\_\_ Once shown organizes well

4. Relations with patients:

- \_\_\_\_\_ Natural ability in patient management.
- \_\_\_\_\_ Makes effort to improve in approach to patient.
- \_\_\_\_\_ Seems ill-at-ease with patients.

5. Cooperation

- \_\_\_\_\_ Very willing
- \_\_\_\_\_ Seems unwilling
- \_\_\_\_\_ When convenient

6. Manual Dexterity

- \_\_\_\_\_ Natural aptitude
- \_\_\_\_\_ Makes real effort to improve
- \_\_\_\_\_ Awkward

7. Personal appearance and Personal Hygiene:

- \_\_\_\_\_ Properly attired for assignment, neat at all times
- \_\_\_\_\_ Hair style and make up not appropriate for a dental office.
- \_\_\_\_\_ Untidy

8. What was the students' attitude toward office staff and suggestions or criticisms they made to her?

9. Are there any **items** which you would suggest adding to her training?

Signed: \_\_\_\_\_

## Evaluation of Dental Offices

---

---

### A. Orientation to Office Procedures:

1. How were you received?
  - a. by assistant
  - b. by dentist
  - c. cordially
  - d. without enthusiasm
  
2. Were you shown office procedures regarding
  - a. bookkeeping
  - b. appointment making
  - c. seating patients
  - d. dismissing patients
  - e. other (name)
  
3. Was the office large enough so that you could move around and see what was going on?
  
4. Did the dentist explain procedures as they arose?

### B. Office Procedures:

1. Did you assist with
  - a. amalgams
    1. mixing
    2. handing
  - b. silicates
    1. mixing
    2. holding matrix
  - c. foil
  - d. inlays
  - e. impressions
  - f. gingivectomies
  - g. extractions
  - h. denture adjustments
  - i. others - name
  
2. Use of telephone
  - a. answer
  - b. call patients
  - c. other



- 2 -

3. Laboratory work
  - a. casting inlays
  - b. pouring models
  - c. repairing dentures
  - d. porcelain jacket
  - e. others - name
  
4. Sterilize instruments
  
5. X-rays
  - a. take
  - b. develop
  - c. mount
  
6. Did you:
  - a. Seat patient
  - b. Dismiss patients
  - c. Make appointments
  
7.
  - a. Clean up operatory after patient left.
  - b. Set up operatory before patient came
  - c. Aspirate
  - d. Set up trays
  
8. How do they order supplies?
  - a. telephone
  - b. letter
  
9. Did they tell the patients you were a student or a new girl?
  
10. Did the dentist ever lose his patience with you?
  
11. List the procedures you were asked to do but did not feel that you were prepared to.

What did you especially like about the office?

What did you not like about the office?

What were you especially impressed by - good and poor:?

If a student is sent to this office for her next clinical experience what hints would you give her?

Name of Dentist \_\_\_\_\_

Name \_\_\_\_\_  
1st Semester \_\_\_\_\_

Seating Patient

Adult patient, conventional chair

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Adult patient, modular chair

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Use of Air and Water (outside mouth)

Hand syringe

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Use of Air and Water (within mouth)

Hand syringe

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Handing Instruments

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Chair Adjustments and Controls

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Child patient

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Child patient

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Unit syringe

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Unit syringe

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Toothbrushing Demonstrations

- 1. Rolling Motion \_\_\_\_\_
- 2. Stillman's \_\_\_\_\_
- 3. Charter's \_\_\_\_\_
- 4. Denture \_\_\_\_\_

Stringing Engine Cord

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Instruments  
Identification

Use

Aspirating

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

Trays:

- |   |   |
|---|---|
| 1. Basic _____  | 9. Extraction, mandibular, _____<br>posterior |
| 2. Prophylactic _____   | 10. Extraction, maxillary, _____<br>posterior |
| 3. Cavity Preparation _____   | 11. Extraction, anterior _____                |
| 4. Amalgam _____  | 12. Root canal _____                          |
| 5. Gold Inlay _____   | 13. Denture Impressions _____                 |
| 6. Gold Foil _____  | 14. Denture adjustment _____                  |
| 7. Synthetic Porcelain _____  | 15. Rubber Dam Application _____              |
| 8. Setting gold inlays, _____<br>crowns or bridges<br>(cementation) | 16. Finishing and Polishing _____             |
|   | 17. Gingivectomy _____                        |

Name \_\_\_\_\_  
1st Semester

X-Ray Mounting

- 1. \_\_\_\_\_ 5. \_\_\_\_\_
- 2. \_\_\_\_\_ 6. \_\_\_\_\_
- 3. \_\_\_\_\_ 7. \_\_\_\_\_
- 4. \_\_\_\_\_ 8. \_\_\_\_\_

Seating Patient for X-Ray

- 1. Upper anterior \_\_\_\_\_
- 2. Upper posterior \_\_\_\_\_
- 3. Lower anterior \_\_\_\_\_
- 4. Lower posterior \_\_\_\_\_

Amalgam

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Zinc Oxide

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Zinc Phosphate for Base

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Zinc Phosphate for Cementing

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Silicate

- 1. \_\_\_\_\_ 3. \_\_\_\_\_
- 2. \_\_\_\_\_ 4. \_\_\_\_\_

Rubber Dam

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Temperature

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Placing burs, mandrels, and stones:

- 1. Straight Hypce. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
- 2. Contra-Angle (tapered shank) a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
- 3. Contra-Angle (latch type) a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
- 4. Airotor a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_
- 5. Prophylactic Angle a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

Cleaning and Oiling

- 1. Straight Hypce. \_\_\_\_\_
- 2. Contra Angle \_\_\_\_\_
- 3. Prophylactic Angle \_\_\_\_\_

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

DENTAL ASSISTING CHECK SHEET (Semester 2)

ROENTGENOGRAPHY

	# films issued	Exposure	Processing	Mounting
<b>Bite Wings:</b>				
1. Mary Belle (two)	_____	_____	_____	_____
2. Patient (two)	_____	_____	_____	_____
<b>Periapical</b>				
3. Maxillary right quadrant on Mary Belle (four)	_____	_____	_____	_____
4. Mandibular left quadrant on Mary Belle (four)	_____	_____	_____	_____
5. Maxillary left quadrant on patient (three)	_____	_____	_____	_____
6. Mandibular right quadrant on patient (three)	_____	_____	_____	_____

Dental Assisting Check Sheet - Semester II (con't.)

Preparing Restorations (week of April 27)

- 1. Amalgam Trituration  
Mortar and Pestle  
Amalgamator \_\_\_\_\_  
\_\_\_\_\_
  
- 2. Demonstrate use of Amalgam Carrier \_\_\_\_\_
  
- 3. Zinc oxide \_\_\_\_\_  
\_\_\_\_\_
  
- 4. Zinc phosphate for base \_\_\_\_\_
  
- 5. Zinc phosphate for cementation \_\_\_\_\_
  
- 6. Silicate \_\_\_\_\_
  
- Seating Patient \_\_\_\_\_
- Adult \_\_\_\_\_
- Child \_\_\_\_\_
  
- Aspiratory \_\_\_\_\_



CHARTING

	Charting	Reading
Model # 1	_____	_____
1	_____	_____
2	_____	_____
2	_____	_____
3	_____	_____
3	_____	_____
4	_____	_____
4	_____	_____
5	_____	_____
5	_____	_____
6	_____	_____
6	_____	_____
7	_____	_____
7	_____	_____
8	_____	_____
8	_____	_____
9	_____	_____
9	_____	_____
10	_____	_____
10	_____	_____

Name \_\_\_\_\_

Dental Laboratory Procedures II

Gold Inlay Technique

	#1	#2	#3	#4
Wax pattern	_____	_____	_____	_____
Sprued	_____	_____	_____	_____
Sprue base with wax	_____	_____	_____	_____
Wax pattern on sprue base (with ring)	_____	_____	_____	_____
Invested	_____	_____	_____	_____
Inlay	_____	_____	_____	_____
Inlay polished	_____	_____	_____	_____

Base plates and Occlusal Rims

Upper base plate	#1 _____	#2 _____
Lower base plate	#1 _____	#2 _____
Upper occlusal rim	_____	_____
Lower occlusal rim	_____	_____

Acrylic Trays

Upper with wax adapted	Lower with wax adapted
Upper with tray adapted	Lower with tray adapted
Upper trimmed	Lower trimmed

Dies

Amalgam die

- Band adapted
- Impression
- Impression boxed
- Impression poured
- Impression trimmed

Stone die

- Band adapted
- Impression
- Impression boxed
- Impression poured
- Impression trimmed

LABORATORY PROCEDURES

## Self-cured acrylic Impression Tray

A self-cured acrylic impression tray is an oversized tray made to an individual cast. The tray is then used to make a more accurate edentulous impression using impression plaster, zinc oxide and eugenol pastes.

### Materials

Stone cast  
Tenax wax  
Wax spatula  
Cellophane  
Mixing cup or jar  
Stainless steel spatula  
7cc - liquid (monomer)  
21cc - powder (polymer)  
Flask or press  
Arbor bands  
Felt cones  
Pumice

### Procedure

1. Prepare a cover of tenax wax over stone cast and seal. Cover wax with vaseline.
2. Add powder to liquid and mix.
3. Allow to set until it has lost its stringiness. Should look like bread dough. CHECK FREQUENTLY.
4. Form between 2 pieces of WET cellophane.
5. Lay one piece of wet cellophane on flask.
6. Press material in flask.
7. Remove top of flask and remove excess material.
8. Adapt formed material to stone cast with fingers. Remove excess mold again.  
\* Save enough material for handle.
9. Adapt handle. Wet tray & handle with liquid.
10. Continue molding until tray starts to set 3-5 min.
11. Tray will set 5-7 min.
12. Remove from cast
13. Trim with arbor bands.
14. Polish with felt cones, muslin wheels, and pumice.

## School of Dental Assistants

### Impression of Edentulous Mouth with Dental Impression Compound

#### Equipment

1. 1½ - 2 cakes impression compound for each impression.
2. Upper and lower impression trays.
3. Compound heater or pan of water with bunsen burner and tripod.

#### Procedures

1. Fit impression tray to mouth.
2. Put compound in water bath until soft.
3. Remove from water bath and knead to insure uniform consistency.
  - a. for upper impression - mold in shape of tray.
  - b. for lower impression - mold in cylindrical form to match lower tray.
4. Place tray and compound into bath to remove all finger prints or wrinkles.
5. Hand tray to instructor who will take the impression.
6. Rinse impression in cool water after removing from mouth.

Note: Compound impression material may be removed from metal by applying vaseline over compound and heating over burner. Wipe off hot compound and vaseline with towel. Be careful - metal, compound, and vaseline will be very hot.

Directions for the Trimming of Edentulous Impressions will be done by demonstration.

#### Beading and Boxing Impressions

##### Material

Boxing Wax, Tenax wax

Wax spatula

Bunsen burner

Sharp knife

Upper and lower impressions - trimmed

##### Upper Impressions

1. Align impression, alveolar ridge must be parallel to bench top.
2. Use 3 thicknesses of boxing wax, ¼" wide.
3. Heat over flame
4. Place 1/8" below periphery following contour of impression.
5. Seal with wax spatula - wax must be smooth with sharp edges.
6. Place boxing wax around beading. Boxing should be 3/4 above highest point of impression.
7. Seal boxing to beading.

M. Masik

- 2 -

Lower Impression

1. Align impression as for upper
2. Cover lingual with Tenax wax.
3. Bead with 3 thicknesses of boxing wax  $\frac{1}{4}$ " wide following contour of lower impression.
4. Seal with wax spatula - wax should be smooth with sharp edges.
5. Box lower impression and seal to beading.

Pouring Edentulous Cast or ModelMaterials

Impression - clean, beaded and boxed

Plaster spatula and rubber bowl

Artificial stone - 150 grams

37 ml. water

Sharp knife

1. Pour water into bowl
2. Add stone evenly into water.  
\* ALWAYS ADD POWDER TO WATER
3. Mix for one minute - mix should have body - you should be able to turn stone upside down without any flowing out.
4. Vibrate bowl to remove excess air.
5. Place small amount of stone in center of impression and vibrate until stone flows into oil grooves of impression.
6. Add stone a little at a time until impression is filled, vibrating every addition.
7. Allow to set until hard - at least 30 minutes.
8. Remove beading and boxing.
9. Remove tray
10. Place impression and cast in warm water until compound is just soft and peel compound from cast.
11. Clean cast
12. Trim cast to fit flask:  
Occlusal plane parallel to bench top: periphery  $\frac{1}{8}$ " -  $\frac{1}{4}$ " wide  
around entire cast - base  $\frac{1}{2}$ " - 1" thick.

M. Masik

## INLAY CASTING TECHNIQUE

### WAX PATTERN

#### Equipment

Technique Tooth

Inlay wax

Lubricating oil-microfilm

Brush

Bunsen burner

Carving instruments

#### Procedures

1. Clean cavity
2. Lubricate cavity - AVOID EXCESS
3. Soften wax by dry heat; hold stick high above flame. Rotate stick constantly; knead to insure uniform softening. (If wax flakes you are holding it too close to flame).
4. Force softened wax into cavity preparation; hold till cooled.
5. Trim off excess - watch margins
6. Carve anatomy
7. Smooth external surface with wet, warm, cotton pellet.

### SPRUNG

#### Equipment

Sprue

Pliers

Base former

Tenax wax

Detergent or wax pattern cleaner

#### Procedure

1. Form cave of wax on base former
2. Warm sprue pin and attach to wax pattern.
3. Add SMALL amount of wax to secure pin.
4. Remove pattern & sprue from tooth and place in base former; use pliers; there should be  $\frac{1}{4}$ " between pattern and base (between blue and red wax) and  $\frac{1}{4}$ " from top of pattern to top of ring.
5. Clean pattern with wax pattern cleaner.
6. Blow off excess (manufacturers directions).
7. Invest immediately.



**INVESTING**Equipment

Casting ring

Asbestos Liner

Brush

Investment powder 50 gm.

Water 20cc. (Manufacturers directions)

Rubber bowl; spatula

Procedures

1. Mold asbestos liner to inside of casting ring to allow for expansion. Wet liner slightly.
2. Pour water into bowl and add investment slowly.
3. Spatulate 30-40 seconds, than vibrate lightly for 30 seconds.
4. Coat wax pattern lightly with investment using brush. If wax shows through at any point add more investment until a smooth thin coating of investment is formed.
5. The casting ring is seated on the sprue base.
6. Slowly pour investment into ring until it is full.
7. Do not disturb ring until investment is set; at least 60 min.
8. Remove sprue base former and sprue pin with pliers.

**CASTING**Equipment

Gold

Flux

Crucible

Rubber bowl with water

Procedure will be given in demonstration:

**POLISHING**Equipment

Pickling dish

Pickling solution

Bicarbonate of Soda solution

Burs - sandpaper disks

Fine stones - rubber wheels

Pumice - gold polish

Procedure

1. Remove inlay from ring and scrub off excess investment.
2. Pickle according to directions of manufacturer of pickling solution used in your office.
3. Cut off sprue close to inlay.
4. Remove excess gold around sprue with stone or disks.
5. Remove any excess gold in occlusal or proximals surface with fine stones and sandpaper disks.
6. Polish with pumice and gold polish.
7. NEVER GRIND OR POLISH INNER SURFACE OF INLAY

## STONE AND AMALGAM DIES

A die is a positive reproduction of an area used in making an inlay, a porcelain crown or a bridge.

### STONE DIES

#### Equipment

Copper band	Laboratory knife
Compound	Bunsen burner
Technique tooth	Matches
Lubricant	Stone
Compound heater	Water
Scissors	Rubber bowl
Wax or tape	Plaster spatula
Wax spatula	

#### Procedure

1. Adapt copper band to technique tooth. Cut flange for proximal portion. Smooth band.
2. Lubricate technique tooth.
3. Heat compound. Force into band and tooth. Let cool and remove tooth.
4. Trim excess compound.
5. Box with wax or tape. Boxing should be 1 inch high.
6. Mix stone and water and vibrate into boxed impression.
7. Let set till hard than remove wax or tape. Warm in water and remove copper band and compound.
8. Trim off excess as shown at demonstration.

### AMALGAM DIES

Equipment is the same as stone except for the substitution of amalgam for stone.

Plus:

Plaster of Paris

1. thru 5. are the same.
6. Mix plaster and water and make a solid brace for the boxed impression. Indicate where the proximal is.
7. Mix amalgam and leave very wet. Pack with amalgam condenser and continue until the impression is filled. The impression must be packed very tightly.  
Let set 24 hours. Trim.

## BASE PLATES AND OCCLUSAL RIMS

### BASE PLATES:

#### Equipment

Rubber bowl and water  
Trimmed edentulous models - upper and lower  
Base plates - upper and lower  
Double ended Akers carver  
Wax spatula  
Bunsen burner  
Scissors  
Arbor bands

#### Procedure

1. Wet cast - keep cast wet at all times to avoid burning.
2. Heat base plate evenly so it is pliable:  
DO NOT OVER HEAT
3. Moisten fingers and adapt to cast.  
\* Trade mark on base plate should face up  
Be sure to cover heels on lower.  
On upper base plate should meet posterior palatine foramen.
4. Cut away excess 1/8" should extend beyond periphery of cast.
5. Reheat and mold 1/8" excess onto base plate to obtain an even rolled edge.
6. Smooth periphery with arbor bands or compound knife.  
Be sure there are no rough edges on base plate.
7. Return to wet cast and readapt until there is no movement.

**OCCLUSAL RIMS:****Equipment**

Bunsen burner  
Pan 2/3 full of water at 150°  
Sharp compound knife  
Occlusal rim wax  
Wax spatula

**Procedure**

1. Heat wax rims in water until pliable.  
Do not overheat; Do not let wax sluff off.
2. Dry rim and place on base plate on center of ridge.
3. With fingers, adapt wax down to periphery of base plate.
4. Smooth wax with hot spatula.
  - a. The anterior portion should have a slight labial slant.
  - b. The posterior portion should be located directly on the ridge to about 1/2" from the posterior border of the base plate.
  - c. Occlusal surface must be smooth and have sharp edges.
5. Chill rims under water.
6. Buff

**DIMENSIONS:**

Width - 12 mm at occlusal surface  
Height - 12 mm from crest of ridge