#### DOCUMENT RESUME

ED 350 438 CE 062 120

TITLE INSTITUTION

Dental Laboratory Technology Program Standards.

Georgia Univ., Athens. Dept. of Vocational

Education.

SPONS AGENCY

Georgia State Dept. of Technical and Adult Education,

Atlanta.

PUB DATE 90

CONTRACT GA-89-110192

NOTE 88p.; For the program guide, see CE 062 119.
PUB TYPE Guides - Classroom Use - Teaching Guides (For

Teacher) (052)

EDRS PRICE

MF01/PC04 Plus Postage.

**DESCRIPTORS** 

Competency Based Education; \*Course Content; Dental

Evaluation; \*Dental Technicians; Dentistry;

\*Laboratory Technology; Postsecondary Education;

\*State Standards; Technical Education; Technical

Institutes; Two Year Colleges

IDENTIFIERS

Georgia

#### **ABSTRACT**

This guide contains 45 program standards for the dental laboratory technology program conducted in technical institutes in Georgia. The dental laboratory technology program, either diploma or associate degree, is designed to ensure that students gain basic competence in the job skills needed for an entry-level employee in dental laboratory technology. The standards are divided into 12 categories: foundations (philosophy, purpose, goals, program objectives, availability, evaluation); admissions (admission requirements, provisional admission requirements, recruitment, evaluation and planning); program structure (curriculum design, program numbering system, program consistency, exit points, credentials, course code, course consistency, course sequence, electives, course transferability); program evaluation and planning (program evaluation; program planning; enrollment, graduation, and placement levels; attrition levels; student performance); instructional program (course content; course objectives; course instruction; occupation-based instruction; evaluation of students; grading system; laboratory management; equipment, supplies, and materials; physical facility); academic skills (academic requirements); employability skills (job acquisition, job retention and advancement); staff (faculty qualifications and responsibilities); advisory committee (function, membership, meetings); special needs (commitment); equity (commitment); and health and safety (commitment). Each standard consists of these components: standard statement, explanatory comment, and evaluative criteria. (KC)

\*



GEORGIA DEPARTMENT OF TECHNICAL AND ADULT EDUCATION FY 89 CONTRACT # 89-110192

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- CThis document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

# **DENTAL LABORATORY PROGRAM STANDARDS**

Developed and Produced Under Contractual Agreement with

Georgia Board of
Technical and Adult Education
Office of Technical Education
660 South Tower
One CNN Center
Atlanta, Georgia 30303-2705
1990



# DENTAL LABORATORY PROGRAM STANDARDS

Dr. Debra Smith,
Dental Laboratory Standards
Development Director

University of Georgia
College of Education
Division of Adult, Business, and Vocational Education
Athens, Georgia

Dr. Richard L. Lynch, Division Chair Ted Brown, Project Coordinator Genet Kibreab, Publications Specialist



#### **ACKNOWLEDGEMENTS**

The development of Dental Laboratory program standards is a significant step for technical education and economic development in Georgia. These standards represent a statewide commitment to provide consistent, quality technical education, to equip our graduates with the background and skills necessary to meet their individual occupational needs, and to meet the currently expanding needs of the Georgia employment market.

Many people have contributed time, effort, and expertise to the standards development project. The Georgia Board of Technical and Adult Education, the Board's Standards Committee, the standards development committee, and the project staff have worked diligently to make the establishment of these standards a reality. Robert Mabry, Doug Bolen, and Patt Stonehouse of the Georgia Department of Technical and Adult Education have provided direction for the project. Walter Sessoms, in his past role as Board's Standards Committee chairman, contributed leadership, motivation, and insight to the standards project. James Crisp, Coordinator of Educational Programs, has provided invaluable assistance in planning and monitoring the project.

These efforts have been sustained by the commitment of the Board's Standards Committee whose members each brought special concern and expertise to the standards development project. William Wiley, present committee chair, has assumed the leadership role with the energy and integrity that will assure successful progress of the standards development process.

We extend sincere thanks to each member of the Board's Standards Committee below.

Fred Chamberlain

Columbus

Jean Hartin Columbus

Judy Hulsey Carrollton Costelle Walker

Atlanta

William Wiley, Chairperson

Macon



Special recognition should also be given to the standards development committee who worked to create the Dental Laboratory program standards. Without the cooperation of Georgia business and industry representatives who donated their time and energies to the project, these standards would not have been possible. We recognize and thank each member of the Dental Laboratory State Technical Committee for their invaluable contribution to the development of the program standards.

Ron Altman Altman Dental Lab

George C. Cofer, CDT Duluth

Joseph Curry JNC Laboratories

Teresa Duff, CDT Proctor Dental Lab

Steve Epley
Epley Crown & Bridge Laboratory

Terry Fohey Nu-Craft Dental Arts, Inc.

Phillip Gold
Oral Arts Dental Lab, Inc.

William Holden, DMD Augusta

Dennis Hoyt Restorative Laboratory Elsworth James Dental Laboratory

Greg Mintz, DMD V.A. Medical Center

Logan Nalley, DMD Augusta

Daniel Perez, CDT Certified Dental Ceramics

D. Buck Plymale, Jr.J. Minor Sturgis Porcelain Laboratory

Betty Pollard Augusta

Jim Stallings Macon

Brenda Wallington, RG Buford

Bill Williams Medical College of Georgia



The Occupational Working Committee, composed of educators from the technical institutes and State Technical Committee members, provided direct technical support and expertise in the development of the program standards. The members of this committee were indispensable in the development of the program standards. We recognize and thank the educators who participated on the Occupational Working Committee.

Merritt Efferson

Atlanta Technical Institute

Lynn Story

Atlanta Technical Institute

Nick Mellinger

Augusta Technical Institute

Wally Turner

Gwinnett Technical Institute

James A. Nicholson

Atlanta Technical Institute

Warren Walker

Gwinnett Technical Institute

We would also like to thank all the other business, industry, and educational leaders who contributed to the development of statewide standards through service as technical experts in the standards information network. In addition, we thank Hoyt Sappé for research, Claire Thompson for communications, Lois Brown and Lee Burket for editorial assistance, and Lisa Parr and Rhonda Farmer for electronic publishing assistance.

Eugene Hunt, Chairperson

Georgia Board of Technical and Adult Education

Ken Breeden, Commissioner

Georgia Department of Technical and Adult Education



# DENTAL LABORATORY PROGRAM STANDARDS

# TABLE OF CONTENTS

FOUNDATIONS	•
	70.01.01
(Philosophy)	70-01-01
(Purpose)	70-01-02
(Goals)	70-01-03
(Program Objectives)	70-01-04
(Availability)	70-01-05
(Evaluation)	70-01-06
ADMISSIONS	
(Admission Requirements)	70-02-01
(Provisional Admission Réquirements)	70-02-02
(Recruitment)	70-02-03
(Evaluation and Planning)	70-02-04
PROGRAM STRUCTURE	
(Curriculum Design)	70-03-01
(Program Numbering System)	70-03-01
(Program Consistency)	70-03-02
(Exit Points)	70-03-03
(Credentials)	70-03-04
(Course Code)	70-03-05
(Course Consistency)	
(Course Sequence)	70-03-07
(Course Sequence)	70-03-08
(Electives)	70-03-09
(Course Transferability)	70-03-10
PROGRAM EVALUATION AND PLANNING	
(Program Evaluation)	70-04-01
(Program Planning)	70-04-02
(Enrollment, Graduation, and Placement Levels)	70-04-03
(Attrition Levels)	70-04-04
(Student Performance)	70-04-05
INSTRUCTIONAL PROGRAM	
(Course Content)	70-05-01
(Course Objectives)	70-05-01
(Course Instruction)	
(Occupation-Based Instruction)	70-05-03
(Fivaliation of Students)	70-05-04
(Evaluation of Students)	70-05-05
(Grading System)	70-05-06



# TABLE OF CONTENTS (Continued)

(Laboratory Management) (Equipment, Supplies, and Materials) (Physical Facility)	70-05-07 70-05-09 70-05-10
ACADEMIC SKILLS (Academic Requirements)	70-06-01
EMPLOYABILITY SKILLS	
(Job Acquisition)	70-07-01
(Job Retention and Advancement)	70-07-02
STAFF	
(Faculty Qualifications and Responsibilities)	70-08-01
ADVISORY COMMITTEE	
(Function)	70-09-01
(Membership)	70-09-02
(Meetings)	70-09-03
SPECIAL NEEDS	
(Commitment)	70-10-01
EQUITY	
(Commitment)	70-11-01
HEALTH AND SAFETY	
(Commitment)	70-12-01



#### HOW TO USE THIS MANUAL

**Tab Dividers** 

This document is divided into sections, each section being divided from the others by means of a section-identifier tab. Each section contains standard(s) pertaining to a particular category of standards.

**Table of Contents** 

The Table of Contents lists the tabbed categories of standards plus the title and identifier number for each standard within each tabbed section.

**Numbering System** 

Each standard has a unique six-digit identifier number. The number is divided into three sets of two-digit couplets, each set being divided by a dash.

Example: 03-04-05...

03 indicates standard document #3 (i.e., The Electronic Engineering Standards document).

04 indicates section #4 in the document (i.e., The Program Evaluation and Planning standards section).

05 indicates standard #5 within section four (i.e., The Student Performance standard within the Program Evaluation and Planning standards section).

Finding a Standard

Standard identifier numbers appear in the upper right-hand corner of each page. To find a given standard, refer to the Table of Contents to find the identifier number of the standard of interest, select the appropriate section tab, and find the desired standard within the selected tab section.

**Amendments** 

Registered manual holders are instructed to keep their manuals updated as amendments are disseminated.

**Document Transmittal** 

All new or revised documents are sent to the registered holder of the manual and are recorded on a Manuals Document Transmittal Form. Transmittals are numbered consecutively, and instructions for use are printed on the form.

Amendment Record The registered holder of the manual records the receipt of all Manual Document Transmittals on the Amendment Record. This record and instructions are found on the reverse side of the manual title page.



# FOUNDATIONS (Philosophy)

### Standard Statement

A philosophy statement is developed expressing the beliefs and values that govern the content and conduct of the Dental Laboratory program.

# **Explanatory Comment**

A statewide program philosophy statement is developed and provided for the Dental Laboratory program. The statewide philosophy statement may be augmented at the local level so that the unique circumstances of the community may be accommodated.

The Dental Laboratory program philosophy statement expresses the fundamental educational and occupational principles that guide the instructional process.

#### Evaluative Criteria

The Dental Laboratory program has a clearly defined, written philosophy statement that is reviewed by the program faculty, the administration, and the program advisory committee.

Any addition to the Dental Laboratory program philosophy statement is developed by the program faculty, the administration, and the program advisory committee.

The philosophy of the Dental Laboratory program is in accordance with the philosophy of the Georgia Board of Technical and Adult Education and reflects the beliefs, values, and attitudes of the institution, the instructional field, the community, and the employment market.

The philosophy of the Dental Laboratory program determines the unique role of the program in meeting the technical educational needs of the students, the community, and the employment market.

The philosophy of the Dental Laboratory program reflects a desire to achieve educational excellence.



The philosophy of the Dental Laboratory program reflects a commitment to meet the needs of business and industry.

The philosophy of the Dental Laboratory program includes a nondiscrimination statement pertaining to race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, and economic disadvantage.

The philosophy statement of the Dental Laboratory program is approved by the administration of the institution.



#### **PHILOSOPHY**

The basic beliefs, attitudes, and concepts that are the foundation of the Dental Laboratory program are expressed in the following statements.

Dental Laboratory is a program of study which is compatible with the policies of the Georgia Board of Technical and Adult Education and encourages each Dental Laboratory program student to benefit and contribute as a partner in the economic development and stability of Georgia. The philosophy of the Dental Laboratory program is founded on the value attributed to individual students, the dental laboratory profession, and technical education.

The Dental Laboratory program of study is consistent with the philosophy and purpose of the institution. The program provides academic foundations in communications, mathematics, and human relations, as well as occupational fundamentals. Program graduates are well trained in the underlying fundamentals of dental laboratory procedures and are well prepared for employment and subsequent upward mobility.

The Dental Laboratory program provides the student with the knowledge and skills to become a qualified dental laboratory generalist. Important attributes for success of program graduates are critical thinking, problem solving, and the application of the training to the work requirement. This profession is presently experiencing growth and the employment market is experiencing shortages of trained dental laboratory technicians.

The program structure acknowledges individual differences and provides opportunities for students to seek fulfillment of their educational goals. The program does not discriminate on the basis of race, color, national origin, religion, sex, handicapping condition, academic disadvantage, or economic disadvantage.

To assist each student to attain his or her respective potential within the program, both the instructor and the student incur an obligation in the learning process. The instructor is a manager of instructional resources and organizes instruction in a manner which promotes learning. The student assumes responsibility for learning by actively participating in the learning process.

ERIC

September 1990 Page 3 of 4

This is a dynamic field which requires attention to current curriculum and up-to-date instructional equipment. The Dental Laboratory program must promote the concept of change as the profession evolves. The need for nurturing the spirit of involvement and lifelong learning is paramount in the dental laboratory field.



# FOUNDATIONS (Purpose)

#### Standard Statement

A purpose statement delineating the instructional services which the Dental Laboratory program provides is developed and implemented.

# **Explanatory Comment**

A statewide purpose statement is developed and provided for the Dental Laboratory program. The statewide purpose statement may be augmented at the local level so that the unique circumstances of the community may be accommodated.

A major purpose of the Dental Laboratory program is to meet community and employment market needs for education in the dental laboratory field.

# Evaluative Criteria

The Dental Laboratory program has a clearly defined, written purpose statement that is reviewed by the program faculty, the administration, and the program advisory committee.

Any addition to the Dental Laboratory program purpose statement is developed by the program faculty, the administration, and the program advisory committee.

The purpose of the Dental Laboratory program is in accordance with the purpose of the Georgia Board of Technical and Adult Education and the institution.

The purpose of the Dental Laboratory program reflects the values and beliefs expressed in the program philosophy.

The purpose of the Dental Laboratory program includes a nondiscrimination statement pertaining to race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, and economic disadvantage.

The purpose statement of the Dental Laboratory program is approved by the administration of the institution.



#### **PURPOSE**

The purpose of the Dental Laboratory program is to provide educational opportunities to individuals that will enable them to obtain the knowledge, skills, and attitudes necessary to succeed in the dental laboratory field.

The Dental Laboratory program provides educational opportunities regardless of race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, or economic disadvantage.

The Dental Laboratory program is intended to produce graduates who are prepared for employment as dental laboratory generalists. Program graduates are to be competent in the general areas of communications, mathematics, and interpersonal relations.

Program graduates are to be competent in the entry-level technical areas of head and neck anatomy, dental materials, tooth morphology, principles of occlusion, removable partial dentures, crowns and bridges, complete dentures, dental ceramics, and orthodontics/pedodontics.



Page 1 of 3

#### **DENTAL LABORATORY**

# FOUNDATIONS (Goals)

### Standard Statement

A program goals statement focuses the efforts of the Dental Laboratory program.

# **Explanatory Comment**

A statewide goals statement is developed and provided for the Dental Laboratory program. The statewide program goals statement may be augmented at the local level so that the unique circumstances of the community may be accommodated.

Goals are broad statements of intent that delineate the achievements the Dental Laboratory program seeks to attain. Goals are stated in non-quantifiable terms.

### Evaluative Criteria

The Dental Laboratory program has a clearly defined, written goals statement that is reviewed by the program faculty, the administration, and the program advisory committee.

Any addition to the Dental Laboratory program goals statement is developed by the program faculty, the administration, and the program advisory committee.

The goals of the Dental Laboratory program are in accordance with the philosophy and purpose of the program.

The goals of the Dental Laboratory program reflect a desire to provide exemplary occupational/technical education.

The goals of the Dental Laboratory program reflect a commitment to assisting students to achieve successful employment in the dental laboratory field.

The goals of the Dental Laboratory program are the basis for the development of program objectives.

The goals of the Dental Laboratory program include a nondiscrimination statement pertaining to race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, and economic disadvantage.



The goals statement of the Dental Laboratory program is approved by the administration of the institution.



September 1990 Page 2 of 3

# GOALS (Process)

The goals of the Dental Laboratory program are to:

- l. Provide education which acknowledges individual differences and respects the right of individuals to seek fulfillment of educational needs.
- 2. Provide an environment which encourages the individual to benefit and contribute as a partner in the economic progress, development, and stability of Georgia.
- 3. Provide education which develops the potential of each student to become a productive, responsible, and upwardly mobile member of society.
- 4. Provide quality dental laboratory education in an atmosphere that fosters interest in and enthusiasm for learning.
- 5. Prepare graduates to function as accountable and responsible members within their field of endeavor.
- 6. Prepare graduates to function as safe and competent practitioners in the dental laboratory field.
- 7. Prepare program graduates with the highest level of competence possible given the constraints of the interests and ability levels of the individual.
- 8. Provide educational and related services without regard to race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, or economic disadvantage.
- 9. Foster employer participation, understanding, and confidence in the instructional process and the competence of Dental Laboratory program graduates.



# FOUNDATIONS (Program Objectives)

# Standard Statement

An objectives statement based on established program goals is developed for the Dental Laboratory program.

# **Explanatory Comment**

A statewide objectives statement is developed and provided for the Dental Laboratory program. The statewide program objectives statement may be augmented at the local level so that the unique circumstances of the community may be accommodated.

Program objectives are desired program outcomes stated in measurable, temporal, and operational terms.

#### Evaluative Criteria

The Dental Laboratory program has a clearly defined, written objectives statement that is reviewed by the program faculty, the administration, and the program advisory committee.

Any addition to the Dental Laboratory program objectives statement is developed by the program faculty, administration, and the program advisory committee.

The objectives of the Dental Laboratory program stress learning outcomes, efficiency, enrollment, public relations, and other outcomes that impact on program quality.

A major objective of the Dental Laboratory program is student achievement of identified exit point competencies.

The objectives of the Dental Laboratory program include a nondiscrimination statement pertaining to race, color, national origin, religion, sex, age, handicapping condition, academic disadvantage, and economic disadvantage.

The objectives statement of the Dental Laboratory program is approved by the administration of the institution.



# OBJECTIVES (Process)

The objectives of the Dental Laboratory program are to:

- 1. Provide current curriculum, instructional materials, and equipment (in accordance with available funding) which teach knowledge, skills, and attitudes appropriate to industry needs.
- 2. Provide educational facilities which foster learning and provide safe, healthy environments available and accessible to all students who can benefit from the program.
- 3. Provide academic instruction which supports effective learning within the program and which enhances professional performance on the job.
- 4. Provide employability skills which foster work attitudes and work habits that will enable graduates of the program to perform as good employees.
- 5. Nurture the desire for learning so that graduates will pursue their own continuing education as a lifelong endeavor.
- 6. Provide an educational atmosphere which promotes a positive self-image and a sense of personal well-being.
- 7. Provide education that fosters development of good safety habits.
- 8. Provide admission, educational, and placement services without regard to race, color, national origin, religion, sex, age, or handicapping condition.
- 9. Provide information to the public regarding the program that will facilitate recruitment and enrollment of students.
- 10. Promote good public relations via contacts and regular communications with business, industry, and the public sector.
- 11. Promote faculty and student rapport and communications to enhance student success in the program.



# FOUNDATIONS (Availability)

# **Standard Statement**

Written philosophy, purpose, goals, and objectives statements for the Dental Laboratory program are made available to the staff of the institution and the general public.

# **Explanatory Comment**

Published Dental Laboratory program philosophy and purpose statements are important recruitment tools that help students to select programs that meet their needs.

### Evaluative Criteria

The philosophy and purpose statements of the Dental Laboratory program are published and made available to the staff of the institution and the general public.

Written goals and objectives are available for the Dental Laboratory program.

Dental Laboratory program philosophy, purpose, goals, and objectives statements are used by student services personnel to aid in recruiting and placing students.



# FOUNDATIONS (Evaluation)

# Standard Statement

The philosophy, purpose, goals, and objectives of the Dental Laboratory program are evaluated.

# **Explanatory Comment**

The evaluation of the Dental Laboratory program philosophy, purpose, goals, and objectives assists the program in meeting student, community, and employment market needs.

### **Evaluative Criteria**

Formal evaluation of the philosophy, purpose, goals, and objectives of the Dental Laboratory program is performed annually and documents input from the program faculty, the administration, and the program advisory committee.

Evaluation of the philosophy, purpose, goals, and objectives of the Dental Laboratory program is conducted to assure congruence with changing community and employment market needs and Georgia Board of Technical and Adult Education philosophy and purpose statements.

Evaluation of the philosophy, purpose, goals, and objectives of the Dental Laboratory program assesses congruence with the requirements of the designated accrediting agency(ies).

Evaluation processes are designed to consider state evaluation processes and requirements and to verify that the philosophy, purpose, goals, and objectives of the Dental Laboratory program are being fulfilled.

Evaluation of the philosophy, purpose, goals, and objectives of the Dental Laboratory program results in revision, as needed.



# ADMISSIONS (Admission Requirements)

### Standard Statement

Statewide admission requirements are implemented for the Dental Laboratory program.

# **Explanatory Comment**

Admission refers to regular admission into a diploma granting program.

Statewide program admission requirements consider state and national occupational licensing and certifying requirements, where applicable.

The institution develops and implements clearly stated diploma program admissions policies and procedures.

# Evaluative Criteria

The requirements for admission to the Dental Laboratory program are:

- a) attainment of 16 or more years of age;
- b) documentation of high school graduation or High School Equivalency Certificate requirements;
- c) achievement of the 9th grade level in reading, English, and math as shown on a statistically validated test; and
- d) completion of application and related procedures.

Admission of transfer students to the Dental Laboratory program is contingent upon their meeting the following requirements:

- a) regular admission and good standing at a regionally accredited diploma or degree granting institution; and
- b) proper completion of application and related procedures.



# ADMISSIONS (Provisional Admission Requirements)

### Standard Statement

Statewide provisional admission requirements are implemented for the Dental Laboratory program.

# **Explanatory Comment**

Provisional admission is granted to qualified students who do not meet the regular admission requirements of the program.

Provisionally admitted students are allowed to take developmental studies courses and/or certain occupational courses as designated in the course sequence standard.

The institution develops and implements clearly stated policies and procedures for entry into diploma programs on a provisional basis.

#### Evaluative Criteria

Provisional admission to the Dental Laboratory program is afforded those students who do not meet program admission requirements but who meet provisional admission requirements.

The requirements for provisional admission to the Dental Laboratory program are:

- a) attainment of 16 or more years of age;
- b) achievement of the 8th grade level in reading, English, and math as shown on a statistically validated test or recommendation by program faculty and designated admissions personnel on the basis of interview and assessment of student potential; and
- c) completion of application and related procedures.

All Dental Laboratory program students initially admitted on a provisional basis meet regular admission requirements prior to graduation.



Provisionally admitted students whose English, math, and/or reading achievement levels do not meet regular program admission requirements are required to enroll in developmental studies courses approved by the Georgia Board of Technical and Adult Education.



# ADMISSIONS (Recruitment)

### Standard Statement

The Dental Laboratory program recruitment materials and practices are in the best interests of the students, institution, community, and employment market.

# **Explanatory Comment**

The recruitment effort makes potential students aware of the services provided by the Dental Laboratory program and the institution.

The recruitment effort seeks to serve the economic development of the community by affording opportunities to prospective students.

The institution develops and implements a systematic, overall recruitment effort designed to assist students in meeting their occupational needs.

### Evaluative Criteria

The recruitment effort assists in maintaining and/or increasing the Dental Laboratory program and institution enrollments.

The recruitment effort of the Dental Laboratory program includes participation in or assistance with:

- a) development and dissemination of informational materials;
- b) recruitment activities with other programs within the institution;
- c) communication with potential students through contact with employers, secondary schools, organizations, the program advisory committee, and others;
- d) promotion of Dental Laboratory program awareness among individuals and groups; and
- e) consideration of the industrial and business needs of the community and employment market.

All recruitment materials and practices are ethical, equitable, and accurate in the depiction of the institution, the Dental Laboratory program, and the potential benefits of program completion.



September 1990 Page 1 of 2

A written description of the admission requirements and procedures, tuition fees, and other costs of the Dental Laboratory program is made available to potential students.



# ADMISSIONS (Evaluation and Planning)

### Standard Statement

An evaluation of the admission requirements of the Dental Laboratory program is conducted.

# **Explanatory Comment**

The admission requirements of the Dental Laboratory program are compatible with the admissions policies and procedures of the institution.

#### Evaluative Criteria

Dental Laboratory program admission requirements are evaluated annually to assure compliance with Georgia Board of Technical and Adult Education policies and standards and designated accrediting agency requirements.

The administration, with input from the program faculty and advisory committee, conducts an annual evaluation of Dental Laboratory program admission requirements to assess their adequacy in meeting the needs of the students, community, and employment market.

The evaluation results are used to modify the admissions procedures of the institution and to suggest Dental Laboratory program admission changes to the Georgia Board of Technical and Adult Education, as needed.



# PROGRAM STRUCTURE (Curriculum Design)

### Standard Statement

The curriculum of the Dental Laboratory program includes four categories of instruction: general core courses, fundamental occupational/technical courses, specific occupational/technical courses, and elective courses.

# **Explanatory Comment**

General core courses and fundamental occupational/technical courses provide the academic and occupational/technical background that supports the specific occupational/technical and elective courses.

### Evaluative Criteria

The Dental Laboratory program requires student completion of general core courses such as math, language skills, and other courses required by the Georgia Board of Technical and Adult Education.

The Dental Laboratory program requires student completion of fundamental occupational/technical courses in introductory concepts, principles, and technologies that provide the foundations for the given occupation and related fields.

The Dental Laboratory program requires student completion of specific occupational/technical courses that build on the foundations provided in the fundamental occupational/technical courses.

Dental Laboratory program students are offered the opportunity to take state-approved elective courses in order to develop their individual interests.



# PROGRAM STRUCTURE (Program Numbering System)

# Standard Statement

A Classification of Instructional Programs (CIP) code is applied to the Dental Laboratory program.

# **Explanatory Comment**

Assignment of a statewide CIP code to every diploma/degree program is the basis for consistent program identification.

# **Evaluative Criteria**

The Dental Laboratory program is assigned a (PGM) CIP code of (PGM) 17.0103 and is consistent with all other programs throughout the state which have the same (PGM) CIP code.



# PROGRAM STRUCTURE (Program Consistency)

### Standard Statement

The Dental Laboratory program utilizes essential course components consistent with statewide program requirements.

# **Explanatory Comment**

Programs assigned an identical (PGM) CIP code are consistent statewide.

### Evaluative Criteria

The Dental Laboratory program is assigned a (PGM) CIP code of (PGM) 17.0103 and utilizes essential components designated for that program number statewide. Program components include but are not limited to:

# a) Program Title

September 1990

**Dental Laboratory** 

# b) Program Description

The Dental Laboratory program prepares students for employment in a variety of positions in today's dental laboratories. The Dental Laboratory program provides learning opportunities which introduce, develop, and reinforce academic and occupational knowledge, skills, and attitudes required for job acquisition, retention, and advancement. Graduates of the program receive a Dental Laboratory diploma.

c)	Ess	Credits			
	1)	Essent	ial Ge	eneral Core Courses	<u>15</u>
		MAT	161	English General Mathematics Psychology	5 5 5



Page 1 of 2

2)	Essenti	Essential Fundamental Technical Courses				
	DEN DLT DLT	101	Head and Neck Anatomy Introduction to Dental Technology Physics and Chemistry of Dental Materials	2 4 5		
	DLT	103	Tooth Morphology	3		
			Principles of Occlusion	42		
3)	Essential Specific Technical Courses					
	DLT	111	Removable Partial Dentures	6		
	DLT	112	Crown and Bridge	6		
	DLT	113	Complete Dentures	6		
	DLT	114	Dental Ceramics	6		
	DLT	115	Orthodontics/Pedodontics	3		
	DLT	116	Fixed Prosthodontics Practicum			
	$\mathbf{Q}$	R		40		
	DLT	117	Removable Prosthodontics Practicum	10		
	XXX	XXX	Electives	5		
Pr	ogram l	Final :	Exit Point			

# d)

Dental laboratory generalist

#### Credits Required for Graduation e)

74 minimum quarter hour credits required for graduation



# PROGRAM STRUCTURE (Exit Points)

### Standard Statement

The Dental Laboratory program faculty documents student attainment of identified exit points.

# **Explanatory Comment**

Exit points are the points within the program at which occupational competencies are achieved to qualify students for an entry level position in their field.

# **Evaluative Criteria**

The faculty of the Dental Laboratory program monitors, evaluates, and records student progress towards achieving exit point competency levels.

The final Dental Laboratory program exit point, documented by a diploma, is a dental laboratory generalist.

Potential exit points within the Dental Laboratory program include, but are not limited to, crown and bridge generalist, removable prosthodontics generalist, ceramics generalist, complete denture generalist, and orthodontics/pedodontics generalist.

The institution documents completion of exit points with a transcript.

Graduation from the Dental Laboratory program is dependent upon meeting the requirements of the Georgia Board of Technical and Adult Education.



# PROGRAM STRUCTURE (Credentials)

#### Standard Statement

The achievement of Dental Laboratory program graduates and leavers is documented by the institution.

# **Explanatory Comment**

A program graduate is a student who successfully fulfills all program requirements. A program leaver is a student who exits from the program prior to completion of all program requirements.

Course description documents are based on the course title, the essential course description, the essential competency areas taught, and the number of credits awarded as detailed in the program-specific standards and the listing of state-approved electives.

#### Evaluative Criteria

The institution grants each Dental Laboratory program graduate a diploma certifying satisfaction of program requirements.

Upon request, each Dental Laboratory program graduate is provided a transcript and course description document detailing courses taken, grades, credits earned, and credential awarded.

Upon request, each Dental Laboratory program leaver who has completed one or more courses is provided a transcript and course description document detailing courses taken, grades, and credits earned.

Upon request, each Dental Laboratory program leaver who has not completed an entire course is provided a transcript and course description document detailing the course entered and withdrawal.



# PROGRAM STRUCTURE (Course Code)

#### Standard Statement

A statewide course identification code is applied to each Dental Laboratory course.

# **Explanatory Comment**

An alphanumeric identification code is assigned to each course.

All Georgia Board of Technical and Adult Education approved courses are included in the course identification coding system.

#### Evaluative Criteria

Each course is assigned an alphanumeric descriptor that serves as the statewide course identification code.

The following list contains the Georgia Board of Technical and Adult Education designated course titles and course identification codes of the Dental Laboratory program.

- DEN 102 Head and Neck Anatomy
- DLT 101 Introduction to Dental Technology
- DLT 102 Physics and Chemistry of Dental Materials
- DLT 103 Tooth Morphology
- DLT 104 Principles of Occlusion
- DLT 111 Removable Partial Dentures
- DLT 112 Crown and Bridge
- DLT 113 Complete Dentures
- DLT 114 Dental Ceramics
- DLT 115 Orthodontics/Pedodontics
- DLT 116 Fixed Prosthodontics Practicum
- DLT 117 Removable Prosthodontics Practicum
- ENG 101 English
- MAT 101 General Mathematics
- PSY 101 Psychology



# PROGRAM STRUCTURE (Course Consistency)

# Standard Statement

Courses assigned a given course identification code are consistent.

# **Explanatory Comment**

Courses assigned the same course identification code are consistent throughout the state.

One quarter equals a minimum of 50 instructional days. One contact hour equals a minimum of 50 minutes of instruction.

One (1) quarter hour credit is defined as follows:

- a) class One contact hour of class per week for the duration of a quarter equals one quarter hour credit; class is defined as instruction which emphasizes group or individualized classroom learning.
- b) demonstration laboratory (D.Lab) Two contact hours of demonstration laboratory per week for the duration of a quarter equals one quarter hour credit; demonstration laboratory is defined as instruction which emphasizes teacher assisted learning activities.
- c) practical performance laboratory (P.Lab) Three contact hours of practical performance laboratory per week for the duration of a quarter equals one quarter hour credit; practical performance laboratory is defined as instruction which emphasizes structured activities requiring the application and practice of occupational competencies.
- d) occupation-based instruction (O.B.I.) Three contact hours of occupation-based instruction per week for the duration of a quarter equals one quarter hour credit; occupation-based instruction is defined as instruction which emphasizes supervised work-experience activities requiring the application of occupational competencies.



# Evaluative Criteria

Each course assigned a given course identification code utilizes certain components identical to those designated for that course identification code statewide.

Components designated for each course identification code include:

- a) course title;
- b) essential course description;
- c) essential competency areas taught; and
- d) number of quarter hour credits awarded for course completion.



# DINTAL LABORANORY

Courses in the Dental Laboratory program include:

### **DEN 102 - HEAD AND NECK ANATOMY**

Focuses on normal head and neck anatomy. Topics include: osteology of the skull, muscles of mastication and facial expression, temporal mandibular joint, arterial and nerve supply of the head, and salivary glands and related structures.

# Competency Areas

- Osteology of the Skull
- Muscles of Mastication and Facial Expression
- Temporal Mandibular Joint
- Arterial and Nerve Supply of the Head
- Salivary Glands and Related Structures

Prerequisite: Provisional admission

# **Hours**

Class/Week - 2 Lab/Week - 0 Credit - 2



# DLT 101 - INTRODUCTION TO DENTAL TECHNOLOGY

Provides students with an overview of dentistry and dental technology. Topics include: historical aspects of dentistry; ethics and jurisprudence related to the dental laboratory; classification, structure, and behavior of pathogenic microbes; body's defense and immunity; mode of disease transmission; CDC, NADL, USPH, and OSHA guidelines for infection control; introduction to equipment; and dental materials.

# Competency Areas

- Historical Aspects of Dentistry
- Ethics and Jurisprudence Related to the Dental Laboratory
- Classification, Structure, and Behavior of Pathogenic Microbes
- Body's Defense and Immunity
- Mode of Disease Transmission
- CDC, NADL, USPH, and OSHA Guidelines for Infection Control
- Introduction to Equipment
- Dental Materials

Prerequisite: Provisional admission

# **Hours**

Class/Week - 3 D.Lab/Week - 2 Credit - 4



# DLT 102 - PHYSICS AND CHEM!STRY OF DENTAL MATERIALS

Introduces the student to the materials used in the dental office and dental laboratory. General chemical and physical science are discussed and applied to the selection and use of materials in the laboratory. Topics include: general chemistry and physics, impression materials, gypsum products, waxes, metallurgy, resins and ceramics, and dental abrasives and polishes.

# Competency Areas

- General Chemistry and Physics
- Impression Materials
- Gypsum Products
- Waxes
- Metallurgy
- Resins and Ceramics
- Dental Abrasives and Polishes

Prerequisite: Program admission

# Hours

Class/Week - 5 Lab/Week - 0 Credit - 5

### **DLT 103 - TOOTH MORPHOLOGY**

Focuses on oral anatomy, dental anatomy, and occlusion with the emphasis on dental morphology. Laboratory exercises incorporate waxing procedures. Topics include: dental terminology, tooth morphology and waxing procedures, and primary and mixed dentition.

# Competency Areas

- Dental Terminology
- Tooth Morphology and Waxing Procedures
- Primary and Mixed Dentition

Prerequisite: Program admission

# Hours

Class/Week - 2 D.Lab/Week - 3

Credit - 3



Page 5 of 12

### **DLT 104 - PRINCIPLES OF OCCLUSION**

Emphasizes advanced techniques in waxing of restorations. Leboratory exercises incorporate waxing of cusp-fossa and cusp-ridge centric occlusion on adjustable articulators. Topics include: tooth landmarks, TMJ functions, dental articulators, and positive waxing techniques.

Competency Areas
------------------

# Hours

Tooth LandmarksTMJ FunctionsDental ArticulatorsPositive Waxing Techniques

Class/Week - 2 D.Lab/Week - 3 Credit - 3

Prerequisites: DLT 101, DLT 103

### **DLT 111 - REMOVABLE PARTIAL DENTURES**

Introduces the materials and techniques used in the fabrication of removable partial dentures. Topics include: materials used in removable partial dentures, preparatory procedures, removable partial denture fabrication procedures, and post-fabrication procedures.

### Competency Areas

### **Hours**

Materials Used in Removable Partial Dentures
Preparatory Procedures

Class/Week - 2 D.Lab/Week - 8

- Removable Partial Denture Fabrication Procedures

Credit - 6

- Post-Fabrication Procedures

Prerequisites: DLT 101, DLT 102, DLT 103



### **DLT 112 - CROWN AND BRIDGE**

Introduces the materials and techniques used in the fabrication of fixed crown and bridge restorations. Topics include: materials used in crown and bridge fabrication, preparatory procedures, fixed crown and bridge fabrication procedures, and post-fabrication procedures.

# Competency Areas

# **Hours**

- Materials Used in Crown and Bridge Fabrication	Class/Week - 2
- Preparatory Procedures	D.Lab/Week - 8
- Fixed Crown and Bridge Fabrication Procedures	Credit - 6

- Post-Fabrication Procedures

Prerequisites: DLT 101, DLT 102, DLT 103

Prerequisite/Corequisite: DLT 104

# **DLT 113 - COMPLETE DENTURES**

Focuses on complete denture fabrication from the preliminary impression to the finished denture. Topics include: materials used in complete dentures, preparatory procedures for complete dentures, complete denture fabrication procedures, and post-fabrication procedures.

# Competency Areas

#### Hours

- Materials Used in Complete Dentures	Class/Week - 2
- Preparatory Procedures for Complete Dentures	D.Lab/Week - 8
- Complete Denture Fabrication Procedures	Credit - 6

- Post-Fabrication Procedures

Prerequisites/Corequisites: DLT 101, DLT 102, DLT 103



### **DLT 114 - DENTAL CERAMICS**

Introduces the materials and techniques used in the fabrication of dental ceramic restorations. Topics include: materials used in dental ceramics, preparatory procedures, ceramic fabrication procedures, and post-fabrication procedures.

# Competency Areas

- Materials Used in Dental Ceramics

- Preparatory Procedures

- Ceramic Fabrication Procedures

- Post-Fabrication Procedures

# Hours

Class/Week - 2 D.Lab/Week - 8

Credit - 6

Prerequisites: DLT 101, DLT 102, DLT 103

# **DLT 115 - ORTHODONTICS/PEDODONTICS**

Introduces the principles of orthodontic treatment with removable appliances. Topics include: principles of occlusion and malocclusion, materials and instruments, orthodontic model preparation, design of orthodontic appliances, and advances in orthodontic treatment.

# Competency Areas

- Principles of Occlusion and Malocclusion
- Materials and Instruments
- Orthodontic Model Preparation
- Design of Orthodontic Appliances
- Advances in Orthodontic Treatment

Prerequisites: DLT 101, DLT 103

# **Hours**

Class/Week - 1 D.Lab/Week - 4

Credit - 3



# **DLT 116 - FIXED PROSTHODONTICS PRACTICUM**

Introduces students to the application and reinforcement of basic fixed prosthodontic principles in an actual job setting or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations on the job. Topics include, but are not limited to: problem solving, adaptability to the job setting, use of proper interpersonal skills, interpretation of work authorizations, application of basic fixed prosthodontic techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, a required weekly seminar, and required practicum or on-the-job training.

# Competency Areas

- Problem Solving
- Adaptability to the Job Setting
- Use of Proper Interpersonal Skills
- Interpretation of Work Authorizations
- Application of Basic Fixed Prosthodontic Techniques
- Professional Development

Prerequisites: DLT 112, DLT 114 Prerequisite/Corequisite: DLT 115

### Hours

Class/Week - 0 O.B.I./Week - 32 Credit - 10



### DLT 117 - REMOVABLE PROSTHODONTICS PRACTICUM

Introduces students to the application and reinforcement of basic removable prosthodontic principles in an actual job setting or practicum experience. Students are acquainted with occupational responsibilities through realistic work situations on the job. Topics include, but are not limited to: problem solving, adaptability to the job setting, use of proper interpersonal skills, interpretation of work authorizations, application of basic removable prosthodontic techniques, and professional development. The occupation-based instruction is implemented through the use of written individualized training plans, written performance evaluation, a required weekly seminar, and required practicum or on-the-job training.

# Competency Areas

- Problem Solving
- Adaptability to the Job Setting
- Use of Proper Interpersonal Skills
- Interpretation of Work Authorizations
- Application of Basic Removable Prosthodontic Techniques
- Professional Development

Prerequisites: DLT 111, DLT 113, DLT 115

Prerequisite/Corequisite: DLT 115

### Hours

Class/Week - 0 O.B.I./Week - 32 Credit - 10



### **ENG 101 - ENGLISH**

Emphasizes the development and improvement of written and oral communication abilities. Topics include: analysis of writing techniques used in selected readings, writing practice, editing and proofreading, research skills, and oral presentation skills. Homework assignments reinforce classroom learning.

# Competency Areas

# **Hours**

- Analysis of Writing Techniques Used in Selected Readings

Class/Week - 5 Lab/Week - 0

- Writing Practice

Credit - 5

- Editing and Proofreading
- Research Skills
- Oral Presentation Skills

Prerequisite: Program admission level English and reading competency

#### **MAT 101 - GENERAL MATHEMATICS**

Emphasizes mathematical skills that can be applied to the solution of occupational/ technical problems. Topics include: properties of numbers, fractions, decimals, percents, ratio/proportion, measurements and conversions, exponents and radicals, and geometric and technical formulas. Class includes lectures, applications, and homework to reinforce learning.

### Competency Areas

### Hours

- Properties of Numbers

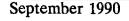
Class/Week - 5

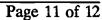
- Fractions

Lab/Week - 0 Credit - 5

- Decimals
- Percents
- Ratio/Proportion
- Measurements and Conversions
- Exponents and Radicals
- Geometric and Technical Formulas

Prerequisite: Program admission level math competency







### **PSY 101 - PSYCHOLOGY**

Emphasizes the basics of human psychology and individual and group behavior. Topics include: social environments, career development, communications and group processes, case problems and typical relationships.

# Competency Areas

- Career Development
- Social Environments
- Communications and Group Processes
- Personality
- Emotions/Motives
- Conflicts/Stress/Anxiety
- Perception and Learning

Prerequisite: Provisional admission

# **Hours**

Class/Week - 5 Lab/Week - 0 Credit - 5



# PROGRAM STRUCTURE (Course Sequence)

### Standard Statement

The Dental Laboratory program requires students to progress through the four instructional course categories in a developmentally valid sequence.

# **Explanatory Comment**

The four instructional course categories are: general core courses, fundamental occupational/technical courses, specific occupational/technical courses, and elective courses.

A developmentally valid instructional sequence is one in which the student acquires prerequisite knowledge and skills before progressing to more advanced studies.

# Evaluative Criteria

September 1990

The Dental Laboratory program requires students to complete prerequisite courses prior to enrolling in subsequent courses.

Provisions are made for Dental Laboratory program students to exempt courses in which they are competent.

The Dental Laboratory program complies with the required provisional admission, program admission, and/or program admission level competency prerequisites listed below.

The Dental Laboratory program reflects the suggested course prerequisites and/or corequisites listed below.

(In the list below prerequisites are indicated by [P] and prerequisites/corequisites are indicated by [P/C].)

Courses	Sequence
DEN 102 Head and Neck Anatomy DLT 101 Introduction to Dental Technology	<ul><li>[P] Provisional admission</li><li>[P] Provisional admission</li></ul>



Page 1 of 2

DLT	102	Physics and Chemistry of Dental Materials	[P] Program admission
DLT	103	Tooth Morphology	[P] Program admission
DLT	104	Principles of Occlusion	[P] DLT 101, DLT 103
DLT	111	Removable Partial Dentures	[P] DLT 101, DLT 102,
			DLT 103
DLT	112	Crown and Bridge	[P] DLT 101, DLT 102,
		•	DLT 103
			[P/C] DLT 104
DLT	113	Complete Dentures	[P/C] DLT 101, DLT 102,
		-	DLT 103
DLT	114	Dental Ceramics	[P] DLT 101, DLT 102,
			DLT 103
DLT	115	Orthodontics/Pedodontics	[P] DLT 101, DLT 103
DLT	116	Fixed Prosthodontics Practicum	[P] DLT 112, DLT 114
			[P/C] DLT 115
DLT	117	Removable Prosthodontics Practicum	[P] DLT 111, DLT 113
			[P/C] DLT 115
ENG	101	English	[P] Program admission
			level English and
			reading competency
MAT	101	General Mathematics	[P] Program admission
			level math
			competency
<b>PSY</b>	101	Psychology	[P] Provisional admission



# PROGRAM STRUCTURE (Electives)

### Standard Statement

Electives are made available for the Dental Laboratory program.

# **Explanatory Comment**

Dental Laboratory program students are provided opportunities to enroll in state-approved elective courses. Elective courses utilize the following components: course title, essential course description, essential competency areas, and number of credits awarded for course completion.

Required courses for a diploma program are available to other diploma programs as elective courses.

#### Evaluative Criteria

Electives are established utilizing the following process:

- a) The administration of the institution, the program faculty, and the program advisory committee cooperate in establishing and utilizing a system to recommend needed and feasible elective courses;
- b) The administration of the institution, the program faculty, and the program advisory committee communicate with the statewide program technical committee and appropriate staff of the Georgia Department of Technical and Adult Education concerning the proposed elective(s);
- c) The administration of the institution, the program faculty, and the program advisory committee consider revisions and prepare a final elective course proposal;
- d) The administration of the institution presents the elective course proposal to the appropriate staff of the Georgia Department of Technical and Adult Education;
- e) The staff of the Georgia Department of Technical and Adult Education reviews the proposal using its established criteria for evaluating elective courses.

Electives are made available for the Dental Laboratory program and elective course work is included in the requirements for program graduation.





# PROGRAM STRUCTURE (Course Transferability)

### Standard Statement

Dental Laboratory program courses are transferable on the basis of their course identification code.

# **Explanatory Comment**

Courses assigned identical course identification codes include consistent essential competency areas; therefore, resultant credits are guaranteed transferability between programs and institutions under the jurisdiction of the Georgia Board of Technical and Adult Education.

Courses that do not have an assigned course identification code but include similar essential competency areas are selectively transferable.

### Evaluative Criteria

Dental Laboratory program courses assigned designated course identification codes are transferable between programs and institutions under the jurisdiction of the Georgia Board of Technical and Adult Education.

Courses taken outside the Georgia Technical and Adult Education system are selectively accepted for transfer on the basis of similarity in competency areas as determined by the Dental Laboratory program faculty and admissions officers.

Only those courses in which a grade of C or better was awarded are transferable.



# PROGRAM EVALUATION AND PLANNING (Program Evaluation)

### Standard Statement

A written evaluation procedure is developed and implemented for the Dental Laboratory program.

# **Explanatory Comment**

Program evaluation procedures vary depending upon the nature of the institution and the program. The administration and program faculty, in association with the program advisory committee, develop and implement program evaluation procedures and data collection techniques that are reasonable and realistic for yearly evaluation purposes.

Dental Laboratory program faculty and administrative personnel work together to determine student enrollment, attrition, graduation, placement, and performance levels.

### Evaluative Criteria

A procedure for continuous Dental Laboratory program evaluation is developed and implemented by the administration of the institution, program faculty, and program advisory committee. Formal evaluation of the Dental Laboratory program is conducted and documented annually.

The Dental Laboratory program evaluation procedure is used to determine the extent to which program goals and objectives are achieved.

The Dental Laboratory program evaluation results are used to determine the adequacy of the existing program to meet current occupational needs.

The Dental Laboratory program evaluation procedure is used to ascertain the consistency of the philosophy, purpose, goals, and objectives of the program with those of the institution, the Georgia Board of Technical and Adult Education, and the designated accrediting agency(ies).

The Dental Laboratory program evaluation procedure includes review of student program evaluations, enrollment, attrition, graduation, placement, and student performance levels.



The Dental Laboratory program evaluation procedure includes consultation with the program advisory committee, frequent communication with employers, analysis of placement and follow-up data, and collection of other information to evaluate and document program relevance.

Dental Laboratory program evaluation results are used to plan program improvements.



Page 2 of 2

# PROGRAM EVALUATION AND PLANNING (Program Planning)

### Standard Statement

A written planning procedure is developed and implemented for the Dental Laboratory program.

# **Explanatory Comment**

The Dental Laboratory program planning procedure allows responsiveness to the changing needs of the community and employment market.

The Dental Laboratory program is evaluated at the institutional level by the students, instructors, program advisory committee, and administration; from this documented data, short-range and long-range program planning is developed.

### Evaluative Criteria

A Dental Laboratory program planning procedure is developed and implemented by the administration of the institution and program faculty. Formal planning for the Dental Laboratory program is conducted and documented annually.

The Dental Laboratory program planning procedure utilizes program evaluation results to facilitate provision of program offerings of sufficient quality and scope to meet community and employment market needs.

The Dental Laboratory program planning procedure considers recommendations for program and course continuation, addition, deletion, and/or modification based on needs assessment information and input from the administration of the institution, the program faculty, and the advisory committee.

The Dental Laboratory program planning procedure considers information from appropriate national, state, and local governmental and non-governmental agencies.

The Dental Laboratory program planning procedure considers information such as demographic studies, occupational surveys, current curricula, cost estimates, instructor availability, equipment needs, and projected enrollment figures that include special populations.



The Dental Laboratory program planning procedure satisfies the program planning requirements of the designated accrediting agency(ies).



# PROGRAM EVALUATION AND PLANNING (Enrollment, Graduation, and Placement Levels)

### Standard Statement

An evaluation of the enrollment, graduation, and placement levels of the Dental Laboratory program is conducted.

# **Explanatory Comment**

Acceptable Dental Laboratory program outcomes (enrollment, graduation, and placement levels) are identified in the Evaluation, Planning, and Budgeting (EPB) model.

### Evaluative Criteria

Annual evaluation of Dental Laboratory program enrollment, graduation, and placement statistics is conducted and documented by the administration and program faculty.

Dental Laboratory program evaluation findings are compared with acceptable outcome levels designated for state evaluation requirements.

Factors contributing to the outcomes of the Dental Laboratory program are identified and analyzed. Where enrollment, graduation, and/or placement levels are unacceptable, appropriate corrective action is taken.



# PROGRAM EVALUATION AND PLANNING (Attrition Levels)

### Standard Statement

An analysis of the attrition level of the Dental Laboratory program is conducted and used in evaluating and improving the program.

# **Explanatory Comment**

Attrition level is a measure of the number of students who withdraw from a program prior to completion of graduation requirements.

Attrition levels vary from one type of program to another depending on the nature of the program and the student population. The attrition level of the Dental Laboratory program is compared with relevant, available national norms and other data.

# **Evaluative Criteria**

Annual evaluation of the attrition level of the Dental Laboratory program is conducted and documented by the program faculty.

Factors contributing to the attrition level are identified and analyzed, and appropriate corrective action is taken.



# PROGRAM EVALUATION AND PLANNING (Student Performance)

# **Standard Statement**

An evaluation of the Dental Laboratory program is conducted based on student achievement levels.

# **Explanatory Comment**

Achievement levels are evaluated on the basis of verified student performance related to academic knowledge, occupational/technical knowledge, and performance skills.

Student achievement levels for the Dental Laboratory program are determined on the basis of student performance data gathered from tests which are locally developed and conducted during each program of study.

### Evaluative Criteria

Annual evaluation of Dental Laboratory program student achievement levels is conducted and documented by the administration and program faculty.

Factors contributing to student achievement levels are identified and analyzed. Where achievement is low, corrective action is taken to improve the program.



# INSTRUCTIONAL PROGRAM (Course Content)

### Standard Statement

The essential content of each Dental Laboratory course is consistent statewide for courses having the same course identification code.

# **Explanatory Comment**

Course content is defined in terms of competency areas taught. The program-specific standards of the Georgia Board of Technical and Adult Education detail the essential competency areas for each course identification code.

### Evaluative Criteria

The content of each Dental Laboratory course having a given course identification code includes, but is not limited to, essential competency areas identified for that course identification code.

Competency areas included in the Dental Laboratory course content reflect advances in the subject area and occupational field and respond to student, community, and employment market needs.

The overall content of each Dental Laboratory course is consistent with established program goals and objectives.



# INSTRUCTIONAL PROGRAM (Course Objectives)

### Standard Statement

Each Dental Laboratory program course is constructed on the basis of course objectives.

# **Explanatory Comment**

Course objectives are desired student performance outcomes stated in measurable performance terms.

The Dental Laboratory program faculty coordinates the planning of course objectives, outlines, and syllabi in an effort to facilitate program efficiency and consistency.

### **Evaluative Criteria**

The objectives of each Dental Laboratory course are derived from established program objectives.

Dental Laboratory course outlines and lesson plans are based on course objectives.



# INSTRUCTIONAL PROGRAM (Course Instruction)

# **Standard Statement**

Suitable instructional techniques and resources facilitate the fulfillment of Dental Laboratory course objectives.

# Explanatory Comment

A wide variety of instructional techniques and resources are used to direct student learning experiences.

### Evaluative Criteria

Course outlines, syllabi, and group or individual lesson preparations serve to organize instruction in each Dental Laboratory classroom and laboratory.

Instructional materials such as competency tests, text books, instruction sheets, audiovisuals, and computer programs are utilized to meet Dental Laboratory program goals and objectives and enhance instructional effectiveness.

Teaching methods, materials, and procedures make provisions for individual differences, needs, and capabilities. Opportunities for remediation are provided to students as needed.

Student learning experiences include theoretical instruction and practical application of knowledge. The ratio of theoretical to practical instruction depends on the nature of program competencies.

Student progress is systematically monitored, evaluated, and recorded by the Dental Laboratory program faculty as part of the instructional process.

Desirable employability skills are integrated into Dental Laboratory course instruction and are modeled by the instructor.

Academic skills are integrated into Dental Laboratory course instruction and are modeled by the instructor.



A syllabus which outlines course objectives, requirements, content, and evaluation techniques is made available to students enrolled in each Dental Laboratory course.

Instructional methods are evaluated routinely, and evidence of improvement is collected and documented by the Dental Laboratory program faculty.



# INSTRUCTIONAL PROGRAM (Occupation-Based Instruction)

### Standard Statement

The Dental Laboratory program offers effective occupation-based instructional delivery where appropriate.

# **Explanatory Comment**

Occupation-based instructional delivery systems include educational work experiences, internships, practicums, and other specialized and/or innovative learning arrangements.

Diploma programs that require internships, work experience arrangements, and/or other occupation-based instructional experiences do so on the basis of designated essential competency areas and courses for the given program.

### **Evaluative Criteria**

Any internship, on-the-job training arrangement, or other educational work experience that is a Dental Laboratory program requirement or elective is:

- a) listed as a course having a course identification code;
- b) assigned course credit and required tuition;
- c) defined by the same requirements for statewide course title, essential course description, and essential competency areas as any other diploma/degree program course;
- d) controlled and supervised by the institution, Dental Laboratory program faculty, and/or the person designated to coordinate work experience courses; and
- e) managed through the use of prescribed individual training plans that detail required student learning and performance objectives and appropriate agreements between institutions and work experience supervisors.



# INSTRUCTIONAL PROGRAM (Evaluation of Students)

### Standard Statement

A system for evaluation of students is developed and implemented by the Dental Laboratory program faculty.

# **Explanatory Comment**

Evaluation of students is based on tests, observations, records, interviews, homework, projects, and/or other evidence of student performance.

### Evaluative Criteria

The Dental Laboratory program system for evaluation of students is consistent with institutional grading policies.

The faculty of the Dental Laboratory program develops, implements, and disseminates a written system for evaluation of students.

The Dental Laboratory program system for evaluation of students reflects the philosophy, purpose, goals, and objectives of the program.

The Dental Laboratory program system for evaluation of students requires use of competency-based measures of student performance.

The Dental Laboratory program system for evaluation of students requires use of both formative and summative evaluation.

The Dental Laboratory program system for evaluation of students includes evaluation and documentation of student achievement in both course specific knowledge and practical application.

The Dental Laboratory program system for evaluation of students includes evaluation and documentation of student achievement in the cognitive, affective, and psychomotor domains.



The Dental Laboratory program system for evaluation of students is reviewed annually and revised, as necessary.



# INSTRUCTIONAL PROGRAM (Grading System)

### Standard Statement

The Dental Laboratory program implements statewide grading standards.

# **Explanatory Comment**

Program grading systems vary in detail but are consistent regarding major principles.

# Evaluative Criteria

The faculty of the Dental Laboratory program develops, implements, and disseminates a written grading system that incorporates statewide grading standards.

The grading system reflects the objectives of the Dental Laboratory program.

The grading system of the Dental Laboratory program is used to promote student awareness of learning progress.

The grading system of the Dental Laboratory program bases grades in occupational courses on documented measures of student knowledge, practical application of knowledge, and employability skills.

The grading system of the Dental Laboratory program establishes passing grades that document student achievement of course competencies at levels acceptable for job entry.

The grading system of the Dental Laboratory program requires use of a grading scale whereby 90 to 100% is an A, 80 to 89% is a B, 70 to 79% is a C, 65 to 69% is a D, and 0 to 64% is an F.

The grading system of the Dental Laboratory program recommends the minimum course grade of C required for progress from specified courses to more advanced courses.

The grading system of the Dental Laboratory program is evaluated annually by the program faculty and revised, as needed.



# INSTRUCTIONAL PROGRAM (Laboratory Management)

### Standard Statement

A system for instructional laboratory management is developed and implemented by the faculty of the Dental Laboratory program.

# Explanatory Comment

An established laboratory management system facilitates productive instructional laboratory operation.

### Evaluative Criteria

The faculty of the Dental Laboratory program develops and implements a written laboratory management system.

The laboratory management system is disseminated to Dental Laboratory program students and faculty.

Institutional policies regarding safety, liability, and laboratory operation are reflected in the Dental Laboratory program laboratory management procedure.

The Dental Laboratory program laboratory management system is consistent with the goals and objectives of the program.

The Dental Laboratory program laboratory management system maximizes the instructional usefulness of student laboratory experiences. The laboratory management system is designed to meet student needs in learning program competencies.

The Dental Laboratory program laboratory management system complies with and stresses safety practices, requires that safety instruction precede laboratory instruction, and establishes required safety tests.

The Dental Laboratory program laboratory management system is developed using input from program faculty, advisory committee members, and, when possible, students.

The laboratory management system is evaluated annually and revised, as needed.



September 1990 Page 1 of 1

# INSTRUCTIONAL PROGRAM (Equipment, Supplies, and Materials)

### Standard Statement

The furnishings, equipment, supplies, and materials for the Dental Laboratory program are sufficient, appropriate, and adequately maintained to support safe and effective instruction.

# **Explanatory Comment**

Program equipment, supplies, and materials include items used in a given occupation and items used in the delivery of instruction.

### Evaluative Criteria

Current and adequately maintained furnishings, equipment, supplies, and materials are available to meet the instructional goals and performance objectives of the Dental Laboratory program.

Students in the Dental Laboratory program are helped to develop transferable occupational skills by using instructional equipment, tools, materials, and supplies that are comparable to those currently used in the occupational field. Tools and equipment reflect industry quality standards.

The furnishings, equipment, supplies, and materials used in the Dental Laboratory program meet or exceed applicable local, state, and federal health and safety standards.

The Dental Laboratory program makes provisions to ensure that all health and safety equipment, machine guards, fixtures, materials, and supplies required by local codes, state law, and professional practice are available and maintained in working order.

The Dental Laboratory program requires that applicable personal safety devices, equipment, and supplies are available, utilized, and maintained in working order.

First aid supplies appropriate for the Dental Laboratory program are available throughout each program area.

Dental Laboratory program equipment, supplies, and materials are installed, color coded, controlled, ventilated, and/or stored in accordance with applicable health and safety codes.



September 1990 Page 1 of 2

The Dental Laboratory program implements an equipment, materials, and supplies management system that delineates proper procedures for purchasing, maintaining, locating, storing, inventorying, securing, distributing, repairing, replacing, and safely using instructional items.

The Dental Laboratory program utilizes its advisory committee and other input in implementing annual evaluation and planning procedures to maintain or improve the adequacy, safety, and management of equipment, materials, and supplies.



# INSTRUCTIONAL PROGRAM (Physical Facility)

# Standard Statement

The Dental Laboratory program is provided with adequate and appropriate facilities.

# **Explanatory Comment**

The facilities for the Dental Laboratory program vary depending on enrollments, learning activities involved, instructional equipment used, indoor and/or outdoor instruction involved, and other factors.

### Evaluative Criteria

Space allocations for the Dental Laboratory program are appropriate for the number of students enrolled and the type of instructional activity involved.

The physical facilities for the Dental Laboratory program are designed to facilitate instructional delivery, allow program flexibility, accommodate instructional management, protect students and staff against safety hazards, protect equipment from loss or damage, provide accessibility to all students, and create a positive atmosphere for effective learning.

The physical facilities for the Dental Laboratory program are arranged to separate noise-producing activities from those that require a quiet environment, to expedite student traffic flow, and to prevent disruption of instruction.

Water, electricity, and other utilities are safely and conveniently provided to the Dental Laboratory program on the basis of instructional needs.

The Dental Laboratory program is provided with lighting, heating, cooling, ventilation, and any specialized control systems needed to maintain hea'thy and safe working conditions and meet instructional requirements.

The physical facilities for the Dental Laboratory program include classrooms, laboratories, and/or other specialized learning areas needed to meet instructional requirements.



The institution provides adequate and appropriate non-instructional facilities including offices, restrooms, storage areas, and any other specialized areas needed to meet Dental Laboratory program needs.

The facilities for the Dental Laboratory program are maintained regularly and operated effectively and cost efficiently.

The Dental Laboratory program faculty and advisory committee conduct an annual facility evaluation which contributes to the overall institutional facility review process.



# ACADEMIC SKILLS (Academic Requirements)

#### Standard Statement

Academic achievement standards are established for the Dental Laboratory program.

### **Explanatory Comment**

Examples of academic skills include, but are not limited to, communication skills, reading comprehension skills, and computation skills.

Developmental studies assists students to improve skills such as language usage, reading, and computation prior to regular program admission.

### Evaluative Criteria

The Dental Laboratory program utilizes academic achievement standards for admission that reflect skills necessary for successful participation in the instructional program.

The institution offers developmental studies to students who do not meet academic achievement standards for program admission.

The institution offers a required general core curriculum consisting of academic instruction.

Opportunities for academic remediation are provided to students while enrolled in Dental Laboratory program courses.

The Dental Laboratory program utilizes academic evaluation achievement standards that reflect skills necessary for successful performance on the job.

Where a state-approved evaluation has not been established, evaluation of essential academic skills is conducted according to standards developed by the local program faculty.



## EMPLOYABILITY SKILLS (Job Acquisition)

#### Standard Statement

Job acquisition competency areas are integrated into the curriculum of the Dental Laboratory program.

## **Explanatory Comment**

Employability skills refer to the basic academic, interpersonal, reasoning, and problem solving skills that, when transferred to the occupational setting, facilitate job acquisition, retention, and advancement.

Job acquisition competency areas consist of essential employability skills that directly influence the ability to obtain employment.

#### **Evaluative Criteria**

The faculty of the Dental Laboratory program ensures that job acquisition competency areas are included in the curriculum.

Job acquisition competency areas include, but are not limited to, the following:

- a) job search;
- b) job application and resume preparation;
- c) interviewing; and
- d) job marketing.

The faculty of the Dental Laboratory program utilizes job follow-up data, current research, and the expertise of the program advisory committee to evaluate and update the delivery of program employability skills training.

The faculty of the Dental Laboratory program assists in providing student employment information to the job placement office.

The faculty of the Dental Laboratory program encourages and guides students in preparing occupationally appropriate job acquisition materials such as applications, resumes, letters of reference, work histories, course descriptions or outlines, transcripts, and other related information.



The media collection includes multi-media employability information appropriate for classroom and individual student use.



## EMPLOYABILITY SKILLS (Job Retention and Advancement)

### Standard Statement

Job retention and advancement competency areas are integrated into the curriculum of the Dental Laboratory program.

## **Explanatory Comment**

Employability skills refer to the basic academic, interpersonal, reasoning, and problem solving skills that, when transferred to the occupational setting, facilitate job acquisition, retention, and advancement.

Job retention and advancement competency areas consist of desirable job performance skills and attitudes that directly influence the ability to maintain employment or achieve an improved employment role.

## **Evaluative Criteria**

The faculty of the Dental Laboratory program ensures that job retention and advancement competency areas are included in the curriculum.

The Dental Laboratory program curriculum stresses professional job performance required for maintaining and advancing in a job including, but not limited to, demonstration of:

- a) knowledge of occupational and academic skills;
- b) quality work standards;
- c) productivity;
- d) communication skills;
- e) punctuality;
- f) problem solving skills;
- g) interpersonal skills;
- h) confidentiality; and
- i) knowledge of the career ladder.



The Dental Laboratory program curriculum stresses professional attitudes required for maintaining and advancing in a job including, but not limited to, demonstration of:

- a) cooperativeness;
- b) pleasantness;
- c) responsibility;
- d) self-control;
- e) enthusiasm;
- f) flexibility;
- g) helpfulness;
- h) loyalty; and
- i) willingness to learn.

The Dental Laboratory program faculty utilizes job follow-up data, current research, and the expertise of the program advisory committee to evaluate and update the delivery of program employability skills training.

The Dental Laboratory program faculty assists in providing student employment information to the job placement office.



# STAFF (Faculty Qualifications and Responsibilities)

## Standard Statement

Qualified faculty are responsible for carrying out the purpose, goals, and objectives of the Dental Laboratory program.

## **Explanatory Comment**

Essential faculty qualifications and responsibilities are detailed in the Certification Manual and the program-specific standards established by the Georgia Board of Technical and Adult Education.

#### **Evaluative Criteria**

The qualifications for each Dental Laboratory program part-time or full-time faculty member meet the requirements specified in the Certification Manual of the Georgia Board of Technical and Adult Education, as appropriate, and the requirements of the designated accrediting agency(ies).

The responsibilities of each Dental Laboratory program part-time or full-time faculty member are in compliance with the requirements specified in the Georgia Board of Technical and Adult Education Policy Manual and are in conformance with the requirements of the designated accrediting agency(ies).

The faculty of the Dental Laboratory program use annual staff development opportunities to assure achievement of occupational and instructional competency.



## ADVISORY COMMITTEE (Function)

#### Standard Statement

A program advisory committee provides expert support for the Dental Laboratory program.

### **Explanatory Comment**

A program advisory committee is established to promote interaction between the Dental Laboratory program and businesses and industries served by the program.

Faculty use the expertise of the advisory committee to improve program content and operation.

#### Evaluative Criteria

The Dental Laboratory program advisory committee assists with developing short-range and long-range plans.

The Dental Laboratory program advisory committee provides advice regarding curriculum content to ensure that courses relate to present and future employment needs.

The Dental Laboratory program advisory committee makes suggestions regarding the modification, addition, or deletion of course offerings.

The Dental Laboratory program advisory committee supports the program through public relations activities.

The Dental Laboratory program advisory committee makes recommendations regarding the design and use of physical facilities.

The Dental Laboratory program advisory committee makes recommendations regarding the selection and maintenance of equipment.

The Dental Laboratory program advisory committee assists in evaluation of program effectiveness, job development, job placement, program promotion, evaluation in relation to standards, program advocacy, and industrial support of the program.



The Dental Laboratory program advisory committee submits its recommendations regarding program related changes to the appropriate state-level technical committee for review on an annual basis.

The Dental Laboratory program faculty provides documented evidence that program advisory committee recommendations are considered and that specific action is taken on each recommendation.



## ADVISORY COMMITTEE (Membership)

#### Standard Statement

The membership of the Dental Laboratory program advisory committee is representative of the community and employment market served by the program.

### **Explanatory Comment**

The Dental Laboratory program advisory committee is composed primarily of persons in the industry served by the program and includes persons within the community and employment market who positively impact the program.

#### Evaluative Criteria

The faculty of the Dental Laboratory program, in cooperation with the administration of the institution, selects the advisory committee.

The Dental Laboratory program advisory committee includes a cross-section of representatives from program related businesses and industries.

The Dental Laboratory program advisory committee includes program-related business and industry representatives who have varying occupational positions.

The Dental Laboratory program advisory committee includes faculty as ex officio members.

The Dental Laboratory program advisory committee is composed of a minimum of five members.

The Dental Laboratory program advisory committee maintains a base of experienced members while acquiring new members.

The Dental Laboratory program advisory committee members are recognized for their dedication and effort to improve the quality of education.



# ADVISORY COMMITTEE (Meetings)

#### **Standard Statement**

Dental Laboratory program advisory committee meetings have a planned program of work.

## Explanatory Comment

Regularly scheduled formal advisory committee meetings focus on planning, developing, implementing, and evaluating the Dental Laboratory programs.

### **Evaluative Criteria**

The Dental Laboratory program advisory committee has an annual program of work on file.

The Dental Laboratory program advisory committee meets a minimum of two times annually on a scheduled basis.

The Dental Laboratory program advisory committee elects officers, including a chairperson and a secretary.

The Dental Laboratory program advisory committee follows an agenda which is distributed to members prior to each meeting.

The chairperson of the Dental Laboratory program advisory committee assists program faculty in developing the agenda for each meeting.

The Dental Laboratory program advisory committee maintains minutes indicating date, agenda, members present, and recommendations.

Minutes are distributed to each Dental Laboratory program advisory committee member prior to each meeting.

The Dental Laboratory program advisory committee maintains an open file of minutes and other necessary documents for a minimum of three years.



The Dental Laboratory program advisory committee members are invited to make periodic classroom visits to the institution.

The Dental Laboratory program advisory committee has a quorum present to conduct business.



## SPECIAL NEEDS (Commitment)

#### Standard Statement

The Dental Laboratory program is committed to providing technical education to special needs students.

### **Explanatory Comment**

Special needs students are those who are academically and/or economically disadvantaged, are physically and/or mentally handicapped, or are national origin minority students with limited English language skills.

The special needs requirements of the Georgia Board of Technical and Adult Education meet or exceed all relevant local, state, and federal legislation.

Special needs legislation includes, but is not limited to, mandates for auxiliary aids to students, removal of architectural and equipment barriers, and non-restrictive career counseling.

#### Evaluative Criteria

Special needs policies and operational procedures that comply with current local, state, and federal special needs legislation are implemented in the Dental Laboratory program.

Students who are academically and/or economically disadvantaged are provided special services and assistance to enable them to succeed in the Dental Laboratory program.

Students who have physical and/or mental impairments are provided special services and assistance to enable them to succeed in the Dental Laboratory program.

Students who are national origin minority students with limited English language skills are provided special services and assistance to enable them to succeed in the Dental Laboratory program.

Dental Laboratory program faculty are prepared, through staff development education, to provide assistance for students with special needs.



All special needs personnel meet Georgia Board of Technical and Adult Education certification requirements.

Course objectives within the Dental Laboratory program are utilized as the basis for developing an Individualized Education Program (IEP) for each handicapped student under 21 years of age enrolled in the program.



# EQUITY (Commitment)

#### Standard Statement

The Dental Laboratory program affords equal access and opportunities to all qualified students and staff.

## **Explanatory Comment**

Equal access and equal opportunity refer to the prohibition of discrimination on the basis of race, color, national origin, religion, sex, age, or handicapping condition in educational programs, activities, and employment.

The equal access and equal opportunity requirements of the Georgia Board of Technical and Adult Education meet or exceed all relevant state and federal legislation.

Equal access and equal opportunity legislation includes, but is not limited to, mandates for: equitable admissions practices, counseling, employment, grievance procedures, and leave; nondiscriminatory recruitment and promotional materials; and public notification of nondiscrimination.

#### Evaluative Criteria

September 1990

The nondiscrimination commitment of the Dental Laboratory program complies with current Georgia Board of Technical and Adult Education policy and state and federal law.

A written institutional policy that ensures equal access to all qualified students who can safely benefit from instructional services regardless of race, color, national origin, religion, sex, age, or handicapping condition is implemented in the Dental Laboratory program.





## HEALTH AND SAFETY (Commitment)

#### Standard Statement

The Dental Laboratory program provides a safe and healthy environment for students and staff.

## **Explanatory Comment**

References for proper health and safety conditions, equipment, practices, and procedures are available in Georgia Board of Technical and Adult Education policy and local, state, and federal law. Emergency and disaster plans, accident reports, and fire drill procedures are outlined in information from the State Fire Marshall's Office, the Civil Defense Division, and the Georgia Department of Human Resources.

Health and safety facility and equipment provisions required by the Georgia Board of Technical and Adult Education meet or exceed appropriate local, state, and federal law.

#### Evaluative Criteria

The physical facility, furnishings, equipment, supplies, and practices of the Dental Laboratory program meet or exceed appropriate local, state, and federal health and safety standards.

Proper health and safety practices are developed, implemented, and integrated into the Dental Laboratory program.



The Georgia Board of Technical and Adult Education does not discriminate on the basis of age, sex, race, color, religion, national origin, or handicap in its educational programs, activities, or employment policies.

