

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Program Title: Dental Laboratory Technology
Occupational Area: Health Science Education

| | |
|-----------------|---------------------------------------|
| Program Numbers | PSAV H170103 |
| CIP Number | 0317.010300 |
| Grade Level | 30, 31 |
| Standard Length | 2040 Hours |
| Certification | DENTAL TEC \$7 \$G DEN LABTEC @7 G |
| Basic Skills | |
| Math | 9 |
| Language | 9 |
| Reading | 9 |

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for entry level employment as dental laboratory technicians SOC code 51-9081, denture technicians crown & bridge technicians, ceramic & technicians or to provide supplemental training for persons previously or currently employed in this occupation. The Health Science Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, and dental laboratory techniques.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses.

III. SPECIAL NOTES: The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 1001.44 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Dental Laboratory Technician And Management - Students receive an Associate in Science degree upon successful completion of the program and are prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

Cooperative training-OJT is appropriate for this program. Whenever cooperative training is offered, the following are required for each student: a training plan, signed by the student, teacher, and the employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a workstation which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

Dental Laboratory Technicians will complete the certificate program and be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

In accordance with Rule 6A-10.040, FAC, the minimum basic skills grade levels required for postsecondary adult vocational program is: Mathematics 9.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

These programs meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Health Occupations Students of America, (HOSA)Inc., is the appropriate CSO (Career Student Organization) as well as participation in a career related professional organization for providing leadership training experiences and for reinforcing specific vocational skills. CSOs, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065(8), FAC.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual

needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

The standard length of the program is 2040 clock hours which includes 90 clock hours for the Health Science Core.

Following the completion of the core the student is eligible to take the national certification examination (Nocti) with instructor approval and the completion of a portfolio.

The following is a diagram of the new structure of this program which is made up of 6 occupational completion points:

TOTAL HOURS 2040

| |
|---|
| DENTAL LABORATORY TECHNICIAN OCP F 270 HRS. Soc 51-9081 |
| CERAMIC TECHNICIAN OCP E 245 HRS. 31-9099 Healthcare support Worker, all others |
| CROWN & BRIDGE TECHNICIAN OCP D 370 HRS. SOC Code 31-9099 Healthcare Support Worker, all others |
| ADVANCED DENTURE TECHNICIAN OCP C 375 HRS. Industry Title SOC Code 31-9099 Healthcare Support Worker, all others |
| DENTURE TECHNICIAN OCP B 690 HRS. SOC Code 31-9099 Healthcare Support Worker, all others |
| Basic Healthcare Worker OCP A- Industry Title CORE-90 HOURS SOC Code 31-9099 Healthcare Support Worker, all others |

IV. INTENDED OUTCOMES: Outcomes 01-11 are referred to as the Health Science Core and do not have to be completed if the student has previously completed the Core in another health occupations program at any level. The Core should be taken first or concurrently with the first course in the program.

After successfully completing this program, the student will be able to:

HEALTH SCIENCE CORE (01-11) 90 hrs. OCP A-Basic Healthcare Worker-
Industry Title SOC Code 31-9099 Healthcare Support Workers, All Others.

- 01.0 Demonstrate knowledge of the health care delivery system and health occupations.
- 02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
- 03.0 Demonstrate legal and ethical responsibilities.
- 04.0 Demonstrate an understanding of and apply wellness and disease concepts.
- 05.0 Recognize and practice safety and security procedures.
- 06.0 Recognize and respond to emergency situations.
- 07.0 Recognize and practice infection control procedures.
- 08.0 Demonstrate computer literacy.
- 09.0 Demonstrate employability skills.
- 10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
- 11.0 Apply basic math and science skills.

DENTURE TECHNICIAN (12-19) OCP-B = 690 HOURS SOC 31-9099(Healthcare Support Workers, all other)

- 12.0 Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.
- 13.0 Practice quality assurance, safety and infection control.
- 14.0 Adhere to legal and ethical principles related to the practice of dental laboratory technology.
- 15.0 Demonstrate knowledge of effective business management techniques.
- 16.0 Demonstrate knowledge of dental sciences.
- 17.0 Dental Materials II: Demonstrate knowledge of physical and mechanical properties of metals and alloys.
- 18.0 Complete Dentures: Fabricate various methods of complete denture construction.
- 19.0 Practical Cases I: Fabricate complete denture construction on practical work received from dental clinic.

ADVANCED DENTURE TECHNICIAN (20-21) OCP-C = 375 HOURS SOC 31-9099(Healthcare Support Workers, all other)

- 20.0 Removable Partial Dentures: Fabricate and identify components of a removable partial denture.
- 21.0 Orthodontic/Pedodontic Appliances: Fabricate orthodontic and pedodontic appliances.

CROWN AND BRIDGE TECHNICIAN (22-24) OCP-D = 370 HOURS SOC 31-9099(Healthcare Support Workers, all other)

- 22.0 Fixed Prosthodontics: Demonstrate knowledge and skills required to fabricate single and multi unit restorations.
- 23.0 Occlusion: Perform basic occlusion, determinants of occlusal morphology and physiology of mandibular movements.
- 24.0 Practical Cases II: Fabricate restorations in the students specialty for patients who receive treatment at the dental research clinic.

CERAMIC TECHNICIAN (25) OCP-E = 245 HOURS SOC 31-9099(Healthcare Support Workers, all other)

25.0 Dental Ceramics: Demonstrate knowledge of basic concepts of porcelain-fused-to-metal techniques.

DENTAL LABORATORY TECHNICIAN (26-27) OCP-F = 270 HOURS SOC 51-9081
Dental Laboratory Technician

26.0 Specialization Removable Appliances: Demonstrate their skills in removable dentures on specific projects.

27.0 Specialization In Fixed Appliances: Perform select proficiency in fixed restorative techniques in chosen areas of specialization.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Laboratory Technology
Secondary Number: H170103

HEALTH SCIENCE CORE: The Health Science Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Science Core in any other health occupations program do not have to repeat intended outcomes 01-11.

OCP A-BASIC HEALTHCARE WORKER- SOC Code 31-9099(Healthcare Support Workers

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

- 01.01 Identify the basic components of the health care delivery system.
- 01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 01.03 Describe the composition and functions of a health care team.
- 01.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 01.05 Develop a basic understanding of human needs throughout the lifespan.
- 01.06 Explain the importance of maintaining professional competence through continuing education.
- 01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.05 Compose written communication using correct spelling, grammar, and format.
- 02.06 Use appropriate medical terminology and abbreviations.
- 02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 02.08 Recognize the importance of patient/client education regarding health care.
- 02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 02.10 Demonstrate telephone usage including taking messages.
- 02.11 Demonstrate ability to give and follow directions.
- 02.12 Distinguish between factual reports and personal opinion.
- 02.13 Read and discuss technical material.

- 03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
- 03.01 Discuss the legal framework of the health care occupation.
 - 03.02 Explain the medical liability of health care workers.
 - 03.03 Explain the patients' "Bill of Rights."
 - 03.04 Describe a Code of Ethics consistent with the health care occupation.
 - 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
 - 03.06 Recognize the limits of authority and responsibility of health care workers.
 - 03.07 Recognize and report illegal and unethical practices of health care workers.
 - 03.08 Recognize and report abuse and neglect.
 - 03.09 Recognize sexual harassment and domestic violence.
- 04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:
- 04.01 Develop a basic understanding of the structure and function of the body systems.
 - 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
 - 04.03 Identify psychological reactions to illness including defense mechanisms.
 - 04.04 Recognize the steps in the grief process.
 - 04.05 Explain basic concepts of positive self image, wellness and stress.
 - 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
 - 04.07 Explain the nutrition pyramid.
 - 04.08 Discuss the adverse effects of the use of alcohol, illegal drugs and steroids on the human body.
- 05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:
- 05.01 Demonstrate the safe use of medical equipment.
 - 05.02 Recognize and report safety hazards.
 - 05.03 Identify and practice security procedures for medical supplies and equipment.
 - 05.04 Demonstrate proper body mechanics.
 - 05.05 Demonstrate the procedure for properly identifying patients.
 - 05.06 Demonstrate procedures for the safe transport and transfer of patients.
 - 05.07 Describe fire safety and evacuation procedures.
 - 05.08 Discuss JCAHO patient safety goals. (www.JCAHO.org)
- 06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:
- 06.01 Monitor and record vital signs.
 - 06.02 Describe legal parameters relating to the administration of emergency care.
 - 06.03 Attain and maintain BLS skills.
 - 06.04 Demonstrate basic understanding of first aid and emergency care.

- 06.05 Recognize adverse drug related emergencies and take appropriate first aid action.
- 07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:
 - 07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
 - 07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
 - 07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.
- 08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:
 - 08.01 Define terms and demonstrate basic computer skills.
 - 08.02 Describe the uses of computers in health care.
- 09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 09.01 Conduct a job search.
 - 09.02 Secure information about a job.
 - 09.03 Identify documents that may be required when applying for a job.
 - 09.04 Complete a job application form correctly.
 - 09.05 Demonstrate competence in job interview techniques.
 - 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 09.07 Identify acceptable work habits.
 - 09.08 Demonstrate knowledge of how to make job changes appropriately.
 - 09.09 Demonstrate desirable health habits.
 - 09.10 Recognize appropriate affective/professional behavior.
 - 09.11 Write an appropriate resume.
- 10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:
 - 10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
 - 10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
 - 10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
 - 10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
 - 10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

- 11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:
- 11.01 Draw, read, and report on graphs, charts and tables.
 - 11.02 Measure time, temperature, distance, capacity, and mass/weight.
 - 11.03 Make and use measurements in both traditional and metric units.
 - 11.04 Make estimates and approximations and judge the reasonableness of the result.
 - 11.05 Convert from regular to 24 hour time.
 - 11.06 Demonstrate ability to evaluate and draw conclusions.
 - 11.07 Organize and communicate the results obtained by observation and experimentation.
 - 11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
 - 11.09 Calculate ratios.

DENTURE TECHNICIAN: Completion of this module and intended outcomes (12-19 / prepares students for the occupation of OCP-B Denture Technician SOC Code 31-9099(Healthcare Support Workers, all others)

- 12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN--The student will be able to:
- 12.01 Identify structures and functions of head and neck anatomy.
 - 12.02 Identify embryonic development of head, oral cavity and individual teeth.
 - 12.03 Identify each tooth and its landmarks.
- 13.0 PRACTICE QUALITY ASSURANCE, SAFETY AND INFECTION CONTROL--The student will be able to:
- 13.01 Practice safety in accordance with institutional policy.
 - 13.02 Identify documentation procedures necessary to comply with state laws.
 - 13.03 Demonstrate knowledge of the dental laboratory technician's role in providing quality assurance in laboratory procedures, reporting, and use and maintenance of equipment.
 - 13.04 Use appropriate dental terminology and abbreviations.
 - 13.05 Demonstrate knowledge, principles, and methods of disease transmission and prevention as related to dental prostheses.
 - 13.06 Demonstrate knowledge of infection control in dental laboratories in accordance with Center for Disease Control (CDC)/OSHA guidelines.
 - 13.07 Implement appropriate JCAHO patient safety goals.
- 14.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY--The student will be able to:
- 14.01 Demonstrate knowledge of the importance of observing the doctor/technician relationship.
 - 14.02 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.

15.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES-
-The student will be able to:

- 15.01 Demonstrate knowledge and use of an office/laboratory procedure manual.
- 15.02 Demonstrate knowledge and use of business finance and operating expenses.
- 15.03 Demonstrate knowledge of pay scale and benefit program for employees and a bookkeeping system.
- 15.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
- 15.05 Demonstrate knowledge of employee hiring orientation.
- 15.06 Demonstrate knowledge of computer applications in the dental laboratory.

16.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES--The student will be able to:

- 16.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.
- 16.02 Demonstrate knowledge of the dynamics of occlusion.
- 16.03 Demonstrate problem-solving skills as related to dental materials.

17.0 DENTAL MATERIALS II: DEMONSTRATE KNOWLEDGE OF PHYSICAL AND MECHANICAL PROPERTIES OF METALS AND ALLOYS--The student will be able to:

- 17.01 Identify how dental materials are affected by changes in the physical and mechanical properties of the materials.
- 17.02 List characteristics of a metal.
- 17.03 Identify the mechanical properties of cast alloys and cold worked metal, strain hardening, recrystallization, and grain growth.
- 17.04 Identify the metals and percentages in all types of dental casting gold alloys and how different alloys of dental gold casting affect the dental restorations.
- 17.05 Identify heat treatment techniques for dental casting gold alloys.
- 17.06 List the types, composition and uses of dental solders/
- 17.07 Identify composition and uses of dental fluxes and pickling agents.
- 17.08 Identify composition, physical and mechanical properties and heat treatment techniques for base metal alloys, chrome cobalt and nickel chrome.
- 17.09 Identify types of bores used in dentistry and the mechanics of cutting.
- 17.10 Identify abrasion and polishing dentifrices used in the dental lab and how each affects the dental restoration.

18.0 COMPLETE DENTURES: FABRICATE VARIOUS METHODS OF COMPLETE DENTURE CONSTRUCTION--The student will be able to:

- 18.01 Make casts by pouring all types of impression material to include dentulous and edentulous impressions.
- 18.02 Construct base plates by either the sprinkle method, roll on techniques and vacuum press matching.
- 18.03 Construct wax occlusion rims to exact specifications.
- 18.04 Articulate cast upon which complete dentures are to be made on 1 plain line and semi adjustable articulators.
- 18.05 Set-up and wax-up complete upper and lower dentures.
- 18.06 Fabricate temporary all-acrylic removable partial dentures.
- 18.07 Repair any and all types of dentures.
- 18.08 Fabricate immediate complete dentures.
- 18.09 Relining complete dentures (upper and lower).
- 18.10 Perform selective milling grinding in the finishing of complete dentures.

19.0 PRACTICAL CASES I: FABRICATE COMPLETE DENTURE CONSTRUCTION ON PRACTICAL WORK RECEIVED FROM DENTAL CLINIC. --The student will be able to:

- 19.01 Make stone or plastic casts by pouring all types of impressions, both dentulous and semi-edentulous impressions, be it alginate, rubber base or silicone.
- 19.02 Construct an acrylic or shellac base plate and stabilized tray if so ordered on the prescription by the doctor.
- 19.03 Construct wax occlusal rim to exact measurements.
- 19.04 Be able to articulate casts on a plain line or semi-adjustable articulator.
- 19.05 Set-up and wax-up cases.
- 19.06 Invest, pack, cure, deflask, finish, and polish.
- 19.07 Repair dentures, flange, adding teeth or clasp if needed to denture.
- 19.08 Reline any upper or lower denture.

ADVANCED DENTURE TECHNICIAN: Completion of this module and intended outcomes (20-21) OCP-C) prepares students for the occupation of Advanced Denture Technician. SOC Code 31-9099(Healthcare Support Workers

20.0 REMOVABLE PARTIAL DENTURES: FABRICATE AND IDENTIFY COMPONENTS OF A REMOVABLE PARTIAL DENTURE. --The student will be able to:

- 20.01 Survey and design maxillary and mandibular removable partial denture framework.
- 20.02 Block out and duplicate master cast.
- 20.03 Identify, explain, and use a variety of clasps.
- 20.04 Wax-up, sprue, invest, burnout and cast precious and non-precious alloy frames.
- 20.05 Finish and polish metal frames and arrange artificial teeth.
- 20.06 Bounding of wrought wire and perform various repairs.

21.0 ORTHODONTIC/PEDODONTIC APPLIANCES: FABRICATE ORTHODONTIC AND PEDODONTIC APPLIANCES --The student will be able to:

- 21.01 Identify and describe various types of malocclusion as presented in the course.
- 21.02 Identify and know the treatment objectives of the orthodontic appliances presented in the course.
- 21.03 Interpret work authorization for orthodontic appliances.

21.04 Complete the assigned laboratory exercises in the course to the standard of clinically acceptable quality.

CROWN & BRIDGE TECHNICIAN: Completion of this module and intended outcomes (22-24 OCP-D) prepares students for the occupation of Crown and Bridge Technician. SOC Code 31-9099(Healthcare Support Workers)

22.0 FIXED PROSTHODONTICS: DEMONSTRATE KNOWLEDGE AND SKILLS REQUIRED TO FABRICATE SINGLE AND MULTI UNIT RESTORATIONS--The student will be able to:

- 22.01 Pour impression to make casts with removable dies.
- 22.02 Prepare dies for waxing.
- 22.03 Fabricate wax patterns for inlays, onlays, 3/5 crowns, and full crowns.
- 22.04 Demonstrate proper techniques in spruing, investing and casting
- 22.05 Finish all metal cast restorations.
- 22.06 Demonstrate proper and accurate soldering skills.
- 22.07 Apply an acrylic veneer to a crown and finish in an acceptable manner.
- 22.08 Construct a two-piece post crown.
- 22.09 Construct an all metal, lower posterior, three-unit bridge.

23.0 OCCLUSION: PERFORM BASIC OCCLUSION, DETERMINANTS OF OCCLUSAL MORPHOLOGY AND PHYSIOLOGY OF MANDIBULAR MOVEMENTS--The student will be able to:

- 23.01 Identify fundamental occlusion patterning associated with the basic mandibular positions.
- 23.02 Dr's Angle's occlusal classifications.
- 23.03 Cusp types from the functional point of view.
- 23.04 Identify the incisal edges and cusps tips of maxillary teeth to mandibular teeth in centric occlusion.
- 23.05 Correlation of maxillary and mandibular cusps.
- 23.06 Mandibular movements.
- 23.07 Function occlusion.

24.0 PRACTICAL CASES II: FABRICATE RESTORATIONS IN THE STUDENTS SPECIALTY FOR PATIENTS WHO RECEIVE TREATMENT AT THE DENTAL RESEARCH CLINIC--The student will be able to:

- 24.01 Complete denture set-up, wax-up and finish.
- 24.02 Perform basic complete denture relines.
- 24.03 Demonstrate knowledge of denture repairs.
- 24.04 Removable partial denture wax-up, casting and finish.
- 24.05 Fabricate a Hawley appliance.
- 24.06 Fabricate space maintainer.
- 24.07 Cast restorations to include: inlay, full crown, acrylic, veneer crown, PFM restoration.

CERAMIC TECHNICIAN: Completion of this module and intended outcomes (25 OCP-E) prepares students for the occupation of Ceramic Technician OCP-D. SOC Code 31-9099(Healthcare Support Workers)

25.0 DENTAL CERAMICS: DEMONSTRATE KNOWLEDGE OF BASIC CONCEPTS OF PORCELAIN-FUSED-TO-METAL TECHNIQUES--The student will be able to:

- 25.01 Describe the components of dental porcelain.
- 25.02 Describe the early porcelain-fused-to-metal systems.

- 25.03 Identify various alloys used in the fabrication of PFM restorations.
- 25.04 Identify and explain the uses of opaque, body, incisal, modifier, glaze and stain porcelains.
- 25.05 Demonstrate proper metal design for individual and multiple-unit PFM restorations.
- 25.06 Demonstrate proper spruing, investing, burnout, casting and metal finishing techniques.
- 25.07 Describe the concept of degassing and metal porcelain bonding.
- 25.08 Demonstrate approved techniques for opaque, body and incisal porcelain application.
- 25.09 Identify various porcelain firing cycles.
- 25.10 Demonstrate approved techniques for contouring and glazing porcelain.
- 25.11 Describe the basic concepts of staining, the color wheel and hue, chroma and value.
- 25.12 Demonstrate and understanding of porcelain furnace calibration and maintenance.

DENTAL LABORATORY TECHNICIAN: Completion of this module and intended outcomes (26-27 / OCP-F) prepares students for the occupation of Dental Laboratory Technician SOC CODE 51-9081.

26.0 SPECIALIZATION REMOVABLE APPLIANCES: DEMONSTRATE THEIR SKILLS IN REMOVABLE DENTURES ON SPECIFIC PROJECTS--The student will be able to:

- 26.01 Survey and design a maxillary and mandibular removable partial denture.
- 26.02 Identify and explain the use of wax in a wide variety of clasps.
- 26.03 Duplicate master casts.
- 26.04 Sprue and invest waxed partial denture castings.
- 26.05 Finish and polish a removable partial denture casting.

27.0 SPECIALIZATION IN FIXED APPLIANCES: PERFORM SELECT PROFICIENCY IN FIXED RESTORATIVE TECHNIQUES IN CHOSEN AREAS OF SPECIALIZATION--The student will be able to:

- 27.01 Fabricate fixed restorations more quickly and with increased skill.
- 27.02 Demonstrate in thorough understanding of the procedures involved in the fabrication of fixed restorations.