

Maui Community College  
Course Outline

*August 2009*  
**Received ~~March 2004~~  
Under Amnesty Program  
SLOs Updated & Linked To Content  
COWIQ Grid Prepared**

1. Alpha DENT Number 152  
Course Title Chairside Dental Assisting  
Credits 4  
Department Allied Health Author  
Date of Outline 2/5/09 Effective Date Spring 2010 5-year Review Date Spring 2015

2. Course Description: Provides supervised clinical experience in dental assisting. Includes advanced and specialty chairside procedures. Introduces specialty practices, pain control, cavity preparation, and care of the aged and medically compromised patient.

Cross-list

Contact Hours/Type Lecture - two (2), Lab - six (6)

3. Pre-requisites DENT 151 with C or better

Pre-requisite may be waived by consent  yes  no

Co-requisites

Recommended Preparation

4. Function/Designation  AA Category Additional Category

AS Allied Health - Dental Hygiene Category List Additional Programs and Category:

AAS Program Category List Additional Programs and Category:

BAS Program Category  Developmental/Remedial

Other/Additional: Explain:

See Curriculum Action Request (CAR) form for the college-wide general education and/or

\_\_\_\_\_  
Chancellor

*BA*

*2/9/09*  
\_\_\_\_\_  
Approval Date

program SLOS this course supports.

- This course outline is standardized and/or the result of a community college or system-wide agreement.  
Responsible committee:

5. Student Learning Outcomes (SLOs): List one to four inclusive SLOs.

*For assessment, link these to #7. Recommended Course Content, and #9. Recommended Course Requirements & Evaluation. Use roman numerals (I, II, III.) to designate SLOs*

On successful completion of this course, students will be able to:

I. Demonstrate all duties assigned to dental assistants to a standard level of clinical proficiency with supervision.

II. Describe orally and in writing, theoretical information and demonstrate all clinical skills and techniques previously experienced and learned in the dental assisting courses.

III.

IV.

6. Competencies/Concepts/Issues/Skills

*For assessment, link these to #7. Recommended Course Content, and #9. Recommended Course Requirements & Evaluation. Use lower case letters (a., b., c...n.) to designate competencies/skills/issues*

On successful completion of this course, students will be able to:

#### Pain Control

- a. Describe the importance of pain control in dentistry.
- b. Describe nitrous oxide/oxygen sedation and its use in dentistry.
- c. Discuss the importance of reducing the dental team's exposure to nitrous oxide.
- d. Discuss intravenous sedation and its use in dentistry.
- e. Discuss general anesthesia and its use in dentistry.

#### Cavity Preparation

- f. Describe the principles of cavity preparation.
- g. Discuss the differences in dental techniques with an amalgam versus a composite restoration.
- h. Discuss why retention pins would be selected for a complex procedure.
- i. Describe the need for placement of an intermediate restoration.
- j. Describe the procedure for placement of composite veneers.

#### Care of Adults and Medically Compromised Patients

- k. Describe the stages of aging in the older population.
- l. Review the importance of the medical history for the medically compromised patient.
- m. List the major medical disorders that may affect the way a patient is treated in the dental office.

#### Care of Pediatric Patients

- n. Describe the appearance and setting of a pediatric dental office.
- o. Discuss the pediatric patient and the stages experienced by children from birth through adolescence.
- p. Discuss the specific behavioral techniques that work as positive reinforcement in the treatment of children.
- q. Describe how children and adults with special needs are treated in a pediatric patient.
- r. List the steps involved in the diagnosis and treatment planning of a pediatric patient.

- s. Discuss the importance of preventive dentistry in pediatrics.

#### Oral Surgery Practice

- t. Describe the specialty of oral and maxillofacial surgery.
- u. Discuss the role of an oral surgery assistant.
- v. Discuss the role of the chain of asepsis during a surgical procedure.
- w. Identify the specialized instruments used for basic surgical procedures.
- x. Describe the surgical procedures typically performed in the general practice.
- y. Describe the type of post-operative care given to a patient after a surgical procedure.

#### Endodontic Practice

- z. Describe the diagnostic testing performed for endodontic diagnosis.
- aa. Discuss the materials used in endodontics.
- bb. Provide an overview of root canal therapy and different endodontic procedures.

#### Periodontal Practice

- cc. Describe the role of the dental assistant in the periodontal practice.
- dd. Explain the procedures necessary for a comprehensive periodontal examination, including radiographs.
- ee. Identify and describe the instruments used in periodontal therapy.
- ff. Identify the indications for placement of periodontal surgical dressings and describe the technique for proper placement.
- gg. Identify systemic conditions that can influence periodontal treatment.
- hh. Describe the types of nonsurgical periodontal therapy.
- ii. Describe the types of surgical periodontal therapy.

#### Orthodontic Practice

- jj. Describe the orthodontic practice environment.
- kk. Describe the types of malocclusion.
- ll. Discuss corrective orthodontics and what type of treatment is involved.
- mm. List the types of diagnostic records used to assess orthodontic problems.

#### Prosthodontic Practice

- nn. Describe prosthodontics and the role of the dental assistant.
- oo. List indications and contraindications for a fixed prosthesis.
- pp. Identify the role of a laboratory technician.
- qq. Describe the differences among full crowns, inlays, onlays, and veneer crowns.
- rr. Differentiate between a partial and a full denture; fixed versus removable appliances.
- ss. Identify indications and contraindications for removable partial and full dentures.
- tt. List the components of a partial denture and full denture.
- uu. Describe the steps in the construction of a removable partial denture.
- vv. Describe the steps in the construction of a full denture.
- ww. Identify home care instructions for removable partial and full dentures.
- xx. Identify the process of relining and repairing a partial and full denture.

#### Dental Equipment Maintenance

- yy. Describe the importance of maintaining dental equipment.
- zz. Describe techniques for troubleshooting, if equipment is not working properly.
- aaa. Demonstrate troubleshooting techniques.

## Clinical Competencies

bbb. Perform all dental assisting functions as defined in the Dental Practice Act, with no soft or hard tissue trauma.

ccc. Instruct patients on oral hygiene care utilizing appropriate armamentarium.

ddd. Present information accumulated during a dental examination in verbal or written form, documenting information in a clear, accurate, and appropriate manner.

eee. Demonstrate knowledge and skills in the application of asepsis and infection control procedures for maintaining proper sterile and aseptic conditions in the dental office.

fff. Demonstrate effective patient management.

ggg. Demonstrate positive attitudes and work collaboratively with members of the dental team.

## 7. Suggested Course Content and Approximate Time Spent on Each Topic

*Linked to #5. Student Learning Outcomes and # 6 Competencies/Skills/Issues*

15 weeks Externship in dental office and weekly seminars. Weekly seminars include:

- 1 week Pain Control (I, II, a, b, c, d, e)
- 1 week Cavity Preparation (I, II, f, g, h, i, j)
- 1 week Care of Adults and Medically Compromised Patients (I, II, k, l, m)
- 1 week Care of Pediatric Patients (I, II, n, o, p, q, r, s)
- 1 week Oral Surgery Practice (I, II, t, u, v, w, x, y)
- 1 week Endodontic Practice (I, II, z, aa, bb)
- 1 week Periodontal Practice (I, II, cc, dd, ee, ff, gg, hh, ii)
- 1 week Orthodontic Practice (I, II, jj, kk, ll, mm)
- 1 weeks Prosthodontic Practice (I, II, nn, oo, pp, qq, rr, ss, tt, uu, vv, ww, xx)
- 4 weeks Clinical Skills and Techniques (I, II, a - ggg)
- 2 weeks DANB Review and Preparation (I, II, a - xx, bbb - ggg)

## 8. Text and Materials, Reference Materials, and Auxiliary Materials

Appropriate text(s) and materials will be chosen at the time the course is offered from those currently available in the field. Examples include: Bird, D. and Robinson, D., *Torres and Ehrlich Modern Dental Assisting*, current edition, Elsevier.

Bird, D. and Robinson, D., *Student Workbook to Accompany Torres and Ehrlich Modern Dental Assisting*, current edition, Elsevier.

Appropriate reference materials will be chosen at the time the course is offered from those currently available in the field. Examples include: Boyd, L., *Dental Instruments: A Pocket Guide*, current edition, Elsevier.

Durley, C. et al., *The DANB Review*, current edition, Dental Assisting National Board.

Durley, C. et al., *DANB's Glossary of Dental Assisting Terms*, current edition, Dental Assisting National Board.

Finkbeiner, B., *Four-Handed Dentistry: A Handbook of Clinical Application and Ergonomic Concepts*, current edition, Prentice Hall.

Massler, M. and Schour, I., *Atlas of the Mouth*, current edition, American Dental Association.

Miller, B. et al., Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing and Allied Health, current edition, Elsevier.

Mosby et al., Mosby's Dental Dictionary, current edition, Elsevier.

Mosby et al., Review Questions and Answers for Dental Assisting, current edition, Elsevier.

Appropriate auxiliary materials will be chosen at the time the course is offered from those currently available in the field. Examples include: State of Hawaii Department of Commerce and Consumer Affairs, Hawaii Administrative Rules Title 16, Chapter 79, Dentists and Dental Hygienists.

State of Hawaii Department of Commerce and Consumer Affairs, Hawaii Revised Statutes Chapter 448, Dentistry.

#### 9. Suggested Course Requirements and Evaluation

*Linked to #5. Student Learning Outcomes (SLOs) and #6 Competencies/Skills/Issues*

Specific course requirements are at the discretion of the instructor at the time the course is being offered. Suggested requirements might include, but are not limited to:

- Prompt attendance is required at all class sessions. (I, II, a - ggg)
- Students will be responsible for completing all assigned reading material in text before each class session. (I, II, a - ggg)
- Complete various learning skills exercises. (I, II, a - ggg)
- Complete various competency exercises. (I, II, bbb, ccc, ddd, eee, fff, ggg)
- Supervised clinical practice. (I, II, a - ggg)
- Attend clinical seminars. (I, II, a - ggg)
- Present at clinical seminars. (I, II, a - ggg)
- Complete all projects. (I, II, a - ggg)

#### Dental Assisting Program Portfolio

Summary of student learning documented and collated.

#### Community Service Participation

Two (2) community service events completed.

#### Dental Education Project

Oral hygiene presentation tailored to teach dental practices.

#### EVALUATION AND GRADING

Quizzes	10% (I, II, a - ggg)
Final exam	20% (I, II, a - ggg)
Portfolio	10% (I, II, a - ggg)
Community service	5% (I, II, a - xx)
Dental education project	5% (I, II, a - aaa)
Clinical/ Lab performance	50% (I, II, a - ggg)

10. Methods of Instruction

Instructional methods will vary considerably by instructor. Specific methods are at the discretion of the instructor teaching the course and might include, but are not limited to:

- Participation in class lecture/ discussion.
- Reading assigned portions in textbooks, journal articles, and/ or modules.
- Seminars.
- Guest speakers and field trips to specialty offices.
- Supervised clinical practice.
- Service and experiential learning.
- Discovery learning.

11. Assessment of Intended Student Learning Outcomes Standards Grid attached

**Grid of Maui Community College Student Learning Outcomes- Dental Assisting**

**KEY:** 3 Major Emphasis: The student is actively involved (uses, reinforces, applies, and evaluated) in the student learning outcomes. The learner outcome is the focus of the class  
 2 Moderate Emphasis: The student uses, reinforces, applies, and is evaluated by this learner outcome, but it is not the focus of the class.  
 1 Minor Emphasis: The student does not address this learner outcome.

0 No Emphasis: The student does not address this learner outcome.

**Dental Assisting Educational Standards**

- I. Demonstrate an understanding of dental assisting roles including the legal, professional, and ethical responsibilities within the community.
- II. Demonstrate basic theoretical knowledge and skills in biological science, dental radiology, chairside dental assisting, and business office procedures to support dental assisting practice and build the foundation for an associate degree dental hygiene program
- III. Demonstrate a commitment to life-long learning and advancing competency over a lifetime of clinical practice.

**General Education Standards**

	DENT 120	DENT 150	DENT 151	DENT 152	DENT 164	DENT 165	DENT 166	DENT 176	DENT 177
<b>Standard 1 - Written Communication</b>									
Outcome 1.1 Use writing to discover and articulate ideas	3	3	2	3	0	0	1	1	1
Outcome 1.2 Identify and analyze the evidence and purpose for any intended communication	3	3	2	3	0	0	1	1	1
Outcome 1.3 Choose language, style, and organization appropriate to particular purposes and audiences.	3	3	2	3	0	0	1	1	1
Outcome 1.4 Gather information and document sources appropriately.	3	3	3	3	0	0	1	1	1
Outcome 1.5 Express a main idea as a thesis, hypothesis, or other appropriate statement	3	3	0	0	0	0	1	1	2
Outcome 1.6 Develop a main idea clearly and concisely with appropriate content	1	3	0	0	0	0	1	1	1
Outcome 1.7 Demonstrate a mastery of the conventions of writing, including grammar, spelling, and mechanics	3	3	0	0	0	0	1	1	1
Outcome 1.8 Demonstrate proficiency in revision and editing	3	3	0	0	0	0	1	1	1
Outcome 1.9 Develop a personal voice in written communication	3	3	0	3	0	0	1	1	0

**Standard 2 - Quantiles Reasoning**

- Outcome 2.1 Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately
- Outcome 2.2 Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate
- Outcome 2.3 Communicate clearly and concisely the methods and results of quantitative problem solving
- Outcome 2.4 Formulate and test hypotheses using numerical experimentation
- Outcome 2.5 Define quantitative issues and problems, gather relevant information, analyze that information, and present results
- Outcome 2.6 Assess the validity of statistical conclusions

Outcome 2.1 Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately	3	3	3	3	0	0	0	3	3
Outcome 2.2 Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate	3	3	0	3	0	0	0	3	3
Outcome 2.3 Communicate clearly and concisely the methods and results of quantitative problem solving	3	3	0	3	0	0	0	3	3
Outcome 2.4 Formulate and test hypotheses using numerical experimentation	0	0	0	0	0	0	0	3	3
Outcome 2.5 Define quantitative issues and problems, gather relevant information, analyze that information, and present results	2	2	0	0	0	0	0	3	3
Outcome 2.6 Assess the validity of statistical conclusions	0	0	1	0	0	0	0	3	0

**Standard 3 - Information Retrieval and Technology**

- Outcome 3.1 Use print and electronic information technology ethically and responsibly
- Outcome 3.2 Demonstrate knowledge of basic vocabulary, concepts, and operations of information retrieval and technology
- Outcome 3.3 Recognize, identify, and define an information need
- Outcome 3.4 Access and retrieve information through print and electronic media, evaluating the accuracy and authenticity of that information
- Outcome 3.5 Create, manage, organize and communicate information through electronic media
- Outcome 3.6 Recognize changing technologies and make informed choices about their appropriateness and use

Outcome 3.1 Use print and electronic information technology ethically and responsibly	3	3	3	3	0	0	0	1	2
Outcome 3.2 Demonstrate knowledge of basic vocabulary, concepts, and operations of information retrieval and technology	3	3	3	3	0	0	0	1	2
Outcome 3.3 Recognize, identify, and define an information need	3	3	0	3	0	0	0	1	2
Outcome 3.4 Access and retrieve information through print and electronic media, evaluating the accuracy and authenticity of that information	3	3	0	3	0	0	0	1	2
Outcome 3.5 Create, manage, organize and communicate information through electronic media	3	3	0	0	0	0	0	1	2
Outcome 3.6 Recognize changing technologies and make informed choices about their appropriateness and use	2	2	2	2	0	0	0	1	2

**Standard 4 - Oral Communication**

- Outcome 4.1 Identify and analyze the audience and purpose of any intended communication
- Outcome 4.2 Gather, evaluate, select, and organize information for the communication
- Outcome 4.3 Use language techniques, and strategies appropriate to the audience and occasion
- Outcome 4.4 Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion
- Outcome 4.5 Summarize, analyze, and evaluate oral communications and ask coherent questions as needed
- Outcome 4.6 Use competent oral expression to initiate and sustain discussions

Outcome 4.1 Identify and analyze the audience and purpose of any intended communication	3	3	3	3	2	2	2	3	3
Outcome 4.2 Gather, evaluate, select, and organize information for the communication	3	3	3	3	2	2	2	3	3
Outcome 4.3 Use language techniques, and strategies appropriate to the audience and occasion	3	3	3	3	2	2	2	3	3
Outcome 4.4 Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion	3	3	3	3	2	2	2	3	3
Outcome 4.5 Summarize, analyze, and evaluate oral communications and ask coherent questions as needed	3	3	3	3	2	2	2	3	3
Outcome 4.6 Use competent oral expression to initiate and sustain discussions	3	3	3	3	2	2	2	3	3

**Standard 5 - Critical Thinking**

- Outcome 5.1 Identify and state problems, issues, arguments, and questions containing in a body of information
- Outcome 5.2 Identify and analyze assumptions and underlying points of view relating to an issue or problem
- Outcome 5.3 Formulate research questions that require descriptive and explanatory analyses
- Outcome 5.4 Recognize and understand multiple modes of inquiry, including investigative methods based on observation and analysis
- Outcome 5.5 Evaluate a problem, distinguishing between relevant and irrelevant facts, opinions, assumptions, issues, values, and biases through the use of appropriate evidence
- Outcome 5.6 Apply problem-solving techniques and skills, including the rules of logic and logical sequence
- Outcome 5.7 Synthesize information from various sources, drawing appropriate conclusions
- Outcome 5.8 Communicate clearly and concisely the methods and results of logical reasoning
- Outcome 5.9 Rely upon and evaluate their thought processes, value system, and world views in comparison to those of theirs

Outcome 5.1 Identify and state problems, issues, arguments, and questions containing in a body of information	3	3	3	3	2	2	2	3	3
Outcome 5.2 Identify and analyze assumptions and underlying points of view relating to an issue or problem	3	3	3	3	2	2	2	3	3
Outcome 5.3 Formulate research questions that require descriptive and explanatory analyses	0	0	0	0	0	0	0	0	0
Outcome 5.4 Recognize and understand multiple modes of inquiry, including investigative methods based on observation and analysis	1	3	3	3	2	2	2	3	1
Outcome 5.5 Evaluate a problem, distinguishing between relevant and irrelevant facts, opinions, assumptions, issues, values, and biases through the use of appropriate evidence	3	3	3	3	2	2	2	3	3
Outcome 5.6 Apply problem-solving techniques and skills, including the rules of logic and logical sequence	3	3	3	3	2	2	2	3	3
Outcome 5.7 Synthesize information from various sources, drawing appropriate conclusions	3	3	3	3	2	2	2	3	3
Outcome 5.8 Communicate clearly and concisely the methods and results of logical reasoning	3	3	3	3	2	2	2	3	3
Outcome 5.9 Rely upon and evaluate their thought processes, value system, and world views in comparison to those of theirs	3	3	3	3	2	2	2	3	3

**Standard 6 - Creativity**

- Outcome 6.1 Generate responses to problems and challenges through intuition and non-linear thinking
- Outcome 6.2 Explore diverse approaches to solving a problem or addressing a challenge.
- Outcome 6.3 Engage in activities without a preconceived purpose.
- Outcome 6.4 Apply creative principles to discover and express new ideas.
- Outcome 6.5 Demonstrate the ability to trust and follow one's instincts in the absence of external direction.
- Outcome 6.6 Build upon or adapt the ideas of others to create unique expressions or solutions.

Outcome 6.1 Generate responses to problems and challenges through intuition and non-linear thinking	2	2	1	1	1	1	1	1	1
Outcome 6.2 Explore diverse approaches to solving a problem or addressing a challenge.	3	3	3	3	2	2	1	2	2
Outcome 6.3 Engage in activities without a preconceived purpose.	0	0	0	0	0	0	0	0	0
Outcome 6.4 Apply creative principles to discover and express new ideas.	2	2	0	0	2	2	2	3	3
Outcome 6.5 Demonstrate the ability to trust and follow one's instincts in the absence of external direction.	2	2	0	0	0	0	0	1	1
Outcome 6.6 Build upon or adapt the ideas of others to create unique expressions or solutions.	2	1	0	2	0	0	0	2	2