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DENT 1180: Digital Technology 1

EFFECTIVE DATE

September 2021

DEPARTMENT

Dental Tech

DESCRIPTION

This course introduces students to the use of dental related software. The information and techniques will be applied to the design and creation of patterns for basic dental restorations from various restorative dental materials. Students will also use the dental software to learn and practice tooth anatomy and morphology.

CREDITS

3.0

YEAR OF STUDY

1st Year Post-secondary

PREREQUISITES

None

COREQUISITES

None

COURSE LEARNING OUTCOMES

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

- Create 3D forms using digital input tools and 3Shape sculpt tools.
- Create 3D forms to manufacture 3D printed objects.
- Use digital input devices (such as 3D mouse and Wacom tablet) for the application of tools in 3Shape Dental Software.
- Use digital sculpting tools to generate files, design non-tooth objects and tooth anatomy (including root form).
- Use dedicated software with 3D printing to fabricate dental restorations.
- Make decisions that reflect critical thinking and problem solving when utilizing digital dental software to design virtual restorations.

PRIOR LEARNING ASSESSMENT & RECOGNITION (PLAR)

None

HOURS

Lab: 90

INSTRUCTIONAL STRATEGIES

Lecture, demonstrations, lab work, discussions, reflections and case scenarios

GRADING SYSTEM

Letter Grade (A-F)

PASSING GRADE

C+ (64%) and (S) Satisfactory Grade for all Lab work

EVALUATION PLAN

Type	Percentage	Assessment activity
Midterm Exam	10	Sculpt anterior tooth (10%) and print ready
Final Exam	20	Sculpt anterior tooth (10%) and premolar (10%) and print ready
Assignments	70	Assignment #1\\nSculpt object + Nest in 3D print software. (Value: 10 %)\n\nAssignment #2\\nSculpt Anterior Teeth and print ready. (Value: 20 %)\n\nAssignment #3\\nSculpt premolar and print ready. (Value: 10%)\n\nAssignment #4\\nSculpt maxillary posterior tooth and print ready. (Value: 15 %)\n\nAssignment #5\\nSculpt mandibular posterior tooth and print ready. (15%)
Lab Work	Satisfactory (S)	Practical Digital Projects:\\nas per marking criterion/rubrics

COURSE TOPICS

- Freeform sculpting using digital input devices and dental CAD (Computer Aided Design) software
- 3Shape Sculpt Tools and Anatomical Functional Geometry
- Creating Dental Crowns

LEARNING RESOURCES

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

Notes:

- Course contents and descriptions, offerings and schedules are subject to change without notice.
- Students are required to follow all College policies including ones that govern their educational experience at VCC. Policies are available on the VCC website at:
<https://www.vcc.ca/about/governance--policies/policies/>.
- To find out how this course transfers, visit the BC Transfer Guide at <https://www.bctransferguide.ca>.

Broadway campus

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Downtown campus

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