CODE: DIGM 126 **TITLE:** Digital Modeling: Z Brush

DIVISION: Arts & Communications **DEPARTMENT**: Art

COURSE DESCRIPTION:

Students will use ZBrush's high-level controls and applications for 3D modeling and texturing. ZBrush's Subdivisional surface modeler will be used for model creation and manipulation. This course includes the fundamentals of the ZBrush interface; the 3D edit mode; texturing techniques; Zspheres modeling; displacement; and rendering within ZBrush.

PREREQUISITES: DIGM 121 and ARTS 111

COREQUISITES: None

CREDITS: 3 LECTURE HOURS: 3 LAB/STUDIO HOURS:

Required Texts: No text required.

REQUIRED MATERIALS: 2 USB storage devices (one to backup all files) and a three ring binder for handouts & notes.

ADDITIONAL TIME REQUIREMENTS:

In addition to class time, students will need to dedicate approximately 6-9 hours per week to working in the computer studio. This time will be essential to the successful completion of course objectives. A learning assistant will be available during regularly scheduled lab hours to work with students. (Refer to the lab schedule.)

COURSE LEARNING OUTCOMES:

Students will be able to:

- Navigate the ZBrush interface to create high-end models and details.
- Create polygonal and subdivisional modeling, and workflow between Maya and ZBrush.
- Create material using Zbrush's intuitive texture painting.
- Develop a portfolio of exercises that demonstrate their understanding of polygon weight, and both realistic and artistic textures. (Technological Literacy, Critical Thinking, Creative Expression)

GRADING STANDARD:

| <u>Grades</u> | | Grade Points | |
|---------------|-----------|--------------|--|
| A | Excellent | 4 | |
| A- | A- | 3.67 | |
| B+ | B+ | 3.33 | |
| В | Good | 3 | |
| B- | B- | 2.67 | |

| C+ | C+ | 2.33 |
|-----|------------------------|------|
| С | Satisfactory | 2.0 |
| Р | Satisfactory or better | 2.0 |
| D | Marginal | 1.0 |
| F | Failing | 0 |
| AUD | AUDIŤ | |
| W | Withdrawal | |

Please see the individual Instructor Addendum for grading guidelines.

<u>Grading Requirements for DIGM 126: Digital Modeling ZBrush</u> Course grading is based upon:

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Critiques/Assignments/Skills

65% of grade:

- Successfully completing all assignments
- Assignments ready for participation in class critiques
 (Grade will be lowered for not participating in scheduled critiques)
- Attitude and willingness to experiment
- Aesthetics/Quality of work
- Evaluation of Core Competency skills
- Final Project: 3D Models

Software Proficiency

25% of grade

• being able to demonstrate a proficiency with the ZBrush software

Attendance

10% of grade

- being prepared and attending all classes
- Attendance Policy: One absence will be excused, however each additional unexcused absence will adversely affect your grade in this course.

COURSE CONTENT:

Unit I: ZBrush basics, navigating the interface

- Students will identify the components in the ZBrush interface.
- Students will be able to explain the projects file structure and create a new project.
- Students will become familiar with the Wacom tablet as used in 3D modeling.
- Students will demonstrate how to change the layout and the interface to improve modeling maneuverability.

Students should refer to the weekly handout for the reading assignment and homework.

Unit II: Working With ZSpheres

- Students will use ZBrush's inherent primitive, the ZSphere to begin their understanding of high-end subdivisional surface modeling.
- Students will familiarize themselves with ZBrush sculpting.
- Students will gain an understanding of different ZBrush tools and brushes.

Students should refer to the weekly handout for the reading assignment and homework.

Unit III: Workflow into and out of ZBrush

- Students will learn how to import and export files from other 3D packages for detailing in ZBrush.
- Students will complete a series of exercises to complete their understanding of ZBrush's edit mode masking capabilities, and adding and subtracting to create more detailed models.
- Students will gain an understanding of bump maps, displacement maps, luminance maps in order to work more easily between Maya and ZBrush.

Students should refer to the weekly handout for the reading assignment and homework.

Unit IV: Texture Painting

- Students will gain an understanding of UV layout and tiles in 3D space.
- Students will create new textures for painting their existing models.
- Students will utilize Projection Master to work with detail brushes and alpha brushes for highly detailed texture painting.
- Students will complete a series of exercise to help them differentiate between realistic texture painting and painting for cartoon-style animation.
- Students will learn to how to export textures for use in Maya and other 3D packages.

Students should refer to the weekly handout for the reading assignment and homework.

Department Policies:

Art Department Policies

Attendance Policy:

Students may receive a failing grade in Art Department courses after three absences.

Lateness Policy:

Students will not miss more than 15 minutes of a class. This includes arriving late to a class or leaving class early. If a student misses more than 15 minutes of a class he/she will be considered absent.

Grading Policy for Art Department Programs:

A student enrolled in an Art Program must maintain a grade of C or better for all courses required in that program. If a student receives a D grade in a required course within a program, that course must be repeated.

College Policies:

For information regarding:

- ♦ Brookdale's Academic Integrity Code
- ♦ Student Conduct Code
- ♦ Student Grade Appeal Process

Please refer to the STUDENT HANDBOOK AND BCC CATALOG.

Notification for Students with Disabilities:

Brookdale Community College offers reasonable accommodations and/or services to persons with disabilities. Students with disabilities who wish to self-identify must contact the Disabilities Services Office at 732-224-2730 or 732-842-4211 (TTY), provide appropriate documentation of the disability, and request specific accommodations or services. If a student qualifies, reasonable accommodations and/or services, which are appropriate for the college level and are recommended in the documentation, can be approved.

Additional Support/Labs:

Learning Assistants are available to work with students during regularly scheduled assisted lab hours. Please refer to the Assisted Lab schedule given to you by your instructor. These assisted lab hours are in effect for the current term. Any changes to this schedule during the term will be posted in the lab. If you need to contact the Learning Assistants by phone their telephone numbers are as follows:

Erik Johanson (732) 224-2519 Susanne Anderson (732) 224-2517

Mental Health:

- Mental Health Crisis Support: From a campus phone, dial 5555 or 732-224-2329 from an external line; off-hours calls will be forwarded to BCC police (2222 from a campus phone)
- Psychological Counseling Services: 732-224-2986 (to schedule an appointment during regular hours)

Course Process

Class meetings include lectures, tutorials, demonstrations, discussions, critiques, and student presentations. Assignments will include tutorials, critical readings, and projects. The project assignments will culminate in completed works that will be evaluated from both technical and aesthetic perspectives. A sequence of readings from the required text book and written tutorials will be followed to present specific practical skills. Project assignments will be presented periodically throughout the course and will allow students to apply these new skills in a creative manner. Studio style critiques of the finished projects will address both technical skills and aesthetic design issues.

The syllabus is intended to give student guidance in what may be covered during the semester and will be followed as closely as possible. However, the faculty member reserves the right to modify, supplement, and make changes as the need arises.