3D DIGITAL DESIGN

Curriculum Standard

2026-2028

New Brunswick
COLLEGE
of CRAFT
& DESIGN

NBCCD

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of CRAFT
& DESIGN

CURRICULUM STANDARD

3D DIGITAL DESIGN

2026 - 2028

Electronic Approval Date: 2026-03-01

The New Brunswick College of Craft and Design (NBCCD) fosters a learner-centered environment that puts the student at the heart of the educational experience.

NBCCD's officially approved document, the Curriculum Standard, details specific learning outcomes necessary for a student to be certified. It also ensures uniformity of the delivery of a program's content.

The Curriculum Standard is an introduction to the program which includes the program description, program learning outcomes, and the program's potential career opportunities. This is followed by information on duration, credits, admission requirements, advanced placement, certification, articulations, and prior learning assessment and recognition.

This document also contains a program delivery sequence and the course profiles with specific course learning outcomes and grading basis.

In addition, the Curriculum Standard is used as a tool for revision and evaluation of the program and for the promotion of transfer agreements with other post-secondary institutions.

NBCCD welcomes all comments and inquiries regarding the implementation of this program and the use of this document. Please forward any requests or suggestions to the attention of:

Anna Mathis, Academic Dean
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Fredericton New Brunswick
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Program Description

3D Digital Design is a two-year diploma program that can be completed in six terms of study. Students gain a solid grounding in 3D design concepts and visual communication strategies that enable them to engage in creative problem solving using digital technology at the core of the creative process. The program focuses primarily on modelling, texturing, drawing, animation, and world building, yet also permits ample time for exploration including character design, rigging, 3D printing, and storytelling. As students progress, they perfect their workflow and develop their focus on specific aspects of 3D Digital Design.

Through applied research, critical discourse and self-reflection, students engage in experimentation and creative problem solving. They learn about written and visual communications for artists and entrepreneurs, art history, drawing and 2D/3D design. Students create a portfolio that celebrates the power of the imagination and can be used to launch their career.

Areas of Study

- 3D Modeling, Texturing and Animation
- Character Design, Rigging and Animation
- Digital Sculpting
- Design for 3D Printing
- World Building
- Visual Storytelling
- Drawing
- Self-promotion and Marketing

Program Learning Outcomes

Following successful completion of this program, students will be able to:

- Design and animate 3-dimensional objects, characters, and environments.
- Design for digital platforms including video games, film, and television.
- Design and produce real world objects and assets using real world materials and 3D printers.
- Research using critical discourse and self-reflection, to engage in experimentation and creative problem solving.
- Communicate visually using the industry standard language of 2D/3D designers, illustrators, and entrepreneurs.
- Launch a creative career by employing the entrepreneurial skills, tools, and design thinking principles to succeed and thrive in a changing contemporary landscape.

Career Possibilities

With an entrepreneurial focus, this program prepares students to establish their own small business, be employed or continue in the Advanced Studio Practice Program at NBCCD or at other leading institutions in Canada and beyond.

Professional opportunities upon graduation include:

- 3D Generalist/Modeler
- 3D Texture Artist
- 3D Animator/Rigger
- Character Designer

- Level Designer/Editor
- Environment Artist
- Illustrator/Concept Artist
- Freelance Designer and Consultant/Entrepreneur

Admission Requirements

For admission requirements, please visit nbccd.ca/admissions.

Certification

Upon successful completion of the prescribed curriculum, the student will receive a diploma in 3D Digital Design.

Modifications to Academic Programs

NBCCD may modify, adapt, or adjust the curriculum requirements, teaching methods, or learning outcomes when necessary to keep the program effective and relevant. Every student accepted for enrolment at NBCCD is deemed to have agreed to any such changes whether made before or after acceptance. NBCCD reserves the right to require enrolled students to meet the revised requirements.

Articulations

The 3D Digital Design program has developed articulation arrangements with other institutions as follows:

Institution: University of New Brunswick (Fredericton)

- Articulation Period: 1998-05-14 - Undetermined
- Information: The Bachelor of Applied Arts (BAA) is an articulated agreement with the University of New Brunswick. For admission requirements, refer to www.unb.ca.

Institution: St. Thomas University (Fredericton, NB)

- Articulation period: 2024-07-05 to 2029-07-05
- Information: Students who complete one of the following diploma programs at NBCCD - Graphic Design, Ceramics, Jewellery/Metal Arts, Fashion Design, Photography/Videography, Textile Design, 3D Digital Design, or Wabanaki Visual Arts - may receive up to 60 transfer credit hours toward St. Thomas University's Bachelor of Arts (Interdisciplinary Major in Humanities). The remaining 60 credits are completed at St. Thomas University. For admission requirements, refer to stu.ca/admissions.

NBCCD acknowledges that we live, work and create on the unsurrendered and unceded traditional Wolastoqey land. The lands of Wabanaki people are recognized in a series of Peace and Friendship Treaties to establish an ongoing relationship of peace, friendship and mutual respect between equal nations. The river that runs by our college is known as Wolastoq (Saint John River), along which live Wolastoqiyik – the people of the beautiful and bountiful river.

FALL 2026 21 CREDITS	DIGD 2000 Modeling and Texturing I 6 CREDITS		DIGD 2001 Visual Storytelling 6 CREDITS	DIGD 2005 Directions in 3D 3 CREDITS	DIGD 2006 3D Printing 3 CREDITS	DRAW 2905 Constructive Drawing I 3 CREDITS
WINTER 2027 19 CREDITS	DIGD 2010 Modeling and Texturing II 6 CREDITS		DIGD 2009 World Building 6 CREDITS	DIGD 2011 Animation 3 CREDITS	DRAW 2911 Life Drawing for 3D Digital Design 3 CREDITS	DIGD 2015 Lab I 1 CREDITS
SPRING 2027 6 CREDITS	DRAW 2912 Constructive Drawing II 3 CREDITS	DIGD 2018 Character I 3 CREDITS				

FALL 2027 19 CREDITS	DIGD 3000 Modelling and Texturing III 6 CREDITS	DIGD 3043 Character II 3 CREDITS	DIGD 3038 Advanced Animation 6 CREDITS		DIGD 3042 3D Fashion Design 3 CREDITS	DIGD 3044 Lab II 1 CREDITS
WINTER 2028 19 CREDITS	DIGD 3050 3D Production 6 CREDITS	DIGD 3051 Character III 3 CREDITS	DIGD 3041 3D Guided Research and Inquiry 3 CREDITS	CCAR 3220 Preparing for a Career in 3D Digital Design 3 CREDITS	DIGD 3052 Digital Imaging 3 CREDITS	DIGD 3053 Lab III 1 CREDITS
SPRING 2028 6 CREDITS	CHOOSE 1: INST 3902 Senior Practicum 6 CREDITS INST 3910 Senior Project: 3D Digital Design 6 CREDITS					

Total Diploma Credits: 90

Fall 1

Code	Title	Credits	Scheduled Hours	Nominal Hours	Requisites
DIGD 2000	Modeling and Texturing I	6	90	180	None
DIGD 2001	Visual Storytelling	6	90	180	None
DIGD 2005	Directions in 3D	3	45	90	None
DIGD 2006	3D Printing	3	45	90	None
DRAW 2905	Constructive Drawing I	3	45	90	None

Total of credits: 21.00

Winter 1

Code	Title	Credits	Scheduled Hours	Nominal Hours	Requisites
DIGD 2010	Modeling and Texturing II	6	90	180	DIGD 2000
DIGD 2009	World Building	6	90	180	DIGD 2001
DIGD 2011	Animation	3	45	90	DIGD 2001
DRAW 2911	Life Drawing for 3D Digital Design	3	45	90	None
DIGD 2015	Lab I	1	15	15	None

Total of credits: 19.00

Spring 1

Code	Title	Credits	Scheduled Hours	Nominal Hours	Requisites
DRAW 2912	Constructive Drawing II	3	90	45	DRAW 2905
DIGD 2018	Character I	3	90	45	DIGD 2010 DRAW 2905

Total of credits: 6.00

Fall 2

Code	Title	Credits	Scheduled Hours	Nominal Hours	Requisites
DIGD 3000	Modeling and Texturing III	6	90	180	DIGD 2010
DIGD 3043	Character II	3	45	90	DIGD 2018
DIGD 3038	Advanced Animation	6	90	180	DIGD 2011
DIGD 3042	3D Fashion Design	3	45	90	None
DIGD 3044	Lab II	1	15	15	None

Total of credits: 19.00

Winter 2

Code	Title	Credits	Scheduled Hours	Nominal Hours	Requisites
DIGD 3050	3D Production	6	90	180	DIGD 3000
DIGD 3051	Character III	3	45	90	DIGD 3043
DIGD 3041	3D Guided Research and Inquiry	3	45	90	DIGD 3000
CCAR 3220	Preparing for a Career in 3D Digital Design	3	45	90	DIGD 2005
DIGD 3052	Digital Imaging	3	45	90	None
DIDG 3053	Lab III	1	15	15	None

Total of credits: 19.00

Spring 2

Code		Title	Credits	Scheduled Hours	Nominal Hours	Requisites
Choose one:	INST 3902	Senior Practicum	6	0	180	None
	INST 3910	Senior Project: 3D Digital Design	6	90	180	None

Total of credits: 6.00

Total Diploma Credits: 90

Course Code/Title: DIGD 2000 Modeling and Texturing I
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
45	45	90	0	0

Course Description

In this course, students are introduced to basic 3D modeling and texturing techniques. They practice these techniques to develop a personal workflow in constructing objects from reference. Students will learn how to apply both texture and materials to finalize the model.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Understand how to navigate and create in a 3D environment.
2. Analyze an object to determine the most effective way to recreate the object in 3D.
3. Create textures and materials for 3D models.
4. Select the appropriate technique to add detail to 3D models.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2001 Visual Storytelling
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
45	45	90	0	0

Course Description

In this course students will use design elements to study visual storytelling using 2D imagery. Students will apply this knowledge to storyboarding and animation, and will also study basic animation concepts.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Understand various forms of visual communication.
2. Compose imagery that communicates intended meaning, and creatively expresses ideas and concepts.
3. Assemble moving images on a linear timeline and create additive meaning.
4. Create a storyboard that describes the framing and order of shots in a time-based environment.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy:

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2005 Directions in 3D
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course students will be introduced to the many possible applications and revenue streams available to 3D Digital Designers. Students will be encouraged to look at the work of other artists and designers and examine what they are doing in the field. Additionally, they will learn about self-promotion studies.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Understand the possible creative opportunities in our field.
2. Engage in self-promotion.
3. Find and evaluate possible revenue streams.
4. Determine how to become part of the bigger community.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2006 3D Printing
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
10	35	45	0	0

Course Description

In this course, students explore the applications of 3D principles in the context of the printing and finishing processes. They apply knowledge of modeling in a practical manner and test each printer's limitations. They will also test various finishing processes on a variety of materials. Students gain skills and develop problem-solving abilities with this process.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Become familiar with 3D printers and understand their limitations.
2. Use the elements and principles of design to create printable 3D models with creativity and imagination.
3. Explore various 3D print media, and experiment with different finishing processes.
4. Gain experience with specific software used with 3D printing.
5. Analyze a variety of applications and techniques for 3D printing.
6. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DRAW 2905 Constructive Drawing I
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
10	35	45	0	0

Course Description

In this course, students draw convincing 3D forms from plans and imagination by freehand and perspective construction methods. Using predominantly pencil, they draw fundamental and complex forms, incorporate them in spatial settings and also render value on lighted forms. These techniques provide basic skills for the visualization and development of 3D imagery for applications in character design, storyboard illustration (for film or gaming), graphic novels and/or presentation renderings.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Construct accurate perspective drawings of fundamental forms, from plans or imagination.
2. Use freehand perspective construction, with knowledge of fundamental solids, and create compound forms from imagination.
3. Create convincing 3D illustrations in spatial settings and with appropriate tonal range.
4. Use appropriate terminology and procedures for perspective projection and orthographic drawings, being familiar with other projection systems.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2010 Modeling and Texturing II
Academic Dean: Anna Mathis
Requisites: DIGD 2000
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
40	50	90	0	0

Course Description

In this course, students learn advanced techniques for 3D modeling and texturing. They explore the applications of 3D principles and design concepts in order to translate from digital objects into physical objects. Students will be introduced to sculpting techniques as an alternative to traditional modeling.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Build on introductory techniques for both hard surface modeling and sculpting.
2. Use software to paint and texture 3D models.
3. Use the elements and principles of design, and imagination to create 3D models.
4. Analyze a variety of applications and techniques for creating 3D assets.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2009 World Building
Academic Dean: Anna Mathis
Requisites: DIGD 2001
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
45	45	90	0	0

Course Description

In this course students will analyze and design environments and assets used in 3D projects. This course is a practical application of visual storytelling. They will engage in communicating visually, constructing meaning, and elevating impact using set design, lighting, and location.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Understand the history of world building.
2. Use colour theory to convey genre, atmosphere, and emotion in moving and interactive images.
3. Distinguish between functionality and esthetics in set design.
4. Construct a snapshot of a fictional world.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2011 Animation
Academic Dean: Anna Mathis
Requisites: DIGD 2001
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course, students will bring their creations to life by building on concepts first introduced in Visual Storytelling. They explore ideas such as keyframes, interpolation, and lighting. Students will gain proficiency in both 2D and 3D animation.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Apply traditional animation concepts to 3D animation.
2. Create convincing movement for 2D and 3D forms.
3. Use armatures to control complex movement of organic and inorganic forms.
4. Explore methods for combining 2D and 3D animation techniques.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DRAW 2911 Life Drawing for 3D Digital Design
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course, students enhance their capacity to see, interpret and draw the complex 3D form of the body. They develop their ability to draw the life model with attention to proportions, shape and general anatomy. Students increase their facility with essential strategies such as gesture, massing, mapping and sighting as applied to figure drawing. In addition, they learn to be expressive and intentional when depicting the human form.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Choose drawing strategies that can express space, form and depth in a drawing, especially of the life model.
2. Produce drawings of the life model that reflect the ability to analyze and represent the structure and form of the human figure.
3. Engage in the process of life drawing attending to perceptual and aesthetic concerns in the drawing process.
4. Critique figure drawings using the appropriate terminology and reflecting an understanding of concepts such as proportion, structure or form, use of value, general anatomy and aesthetics.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2015 Lab 1; DIGD 3044 Lab II; DIGD 3053 Lab III
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 15/15
Credits: 1

Lecture	Studio	Homework	Independent Study	Practicum
5	10	0	0	0

Course Description

This course provides a structured yet exploratory environment for students to strengthen their technical skills in 3D digital design. Through a combination of guided instruction and self-directed practice, students will work on content from current courses, reinforcing concepts and skills while exploring alternate approaches. Emphasis is placed on reflective practice, skill development, and risk-taking within a supportive studio environment. The lab encourages experimentation and problem-solving to enhance students' design practice.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Engage in reflective practice to evaluate their learning progress and identify areas for improvement.
2. Strengthen fundamental skills in 3D digital design through focused practice.
3. Apply problem-solving strategies to troubleshoot challenges and explore solutions.
4. Take creative risks to explore alternative approaches.
5. Use instructor guidance alongside self-directed work to reinforce learning and improve skills.
6. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy:

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Pass/fail grading with pass mark of 60%.

Course Code/Title: DRAW 2912 Constructive Drawing II
Academic Dean: Anna Mathis
Requisites: DRAW 2905
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
10	35	45	0	0

Course Description

In this course, students become familiar with human proportions and anatomical landmarks that allow them to construct figures from simple forms. They learn techniques to determine and control size in perspective depth, to create perspective reflections and to introduce figures into perspective views.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Construct a figure from simple forms using convincing human proportions and anatomical landmarks.
2. Construct a complex perspective view that incorporates figures.
3. Create a plan view from a perspective view.
4. Create imagery that communicates intended information and/or expresses specific ideas and/or concepts with creativity and imagination.
5. Successfully analyze a variety of techniques in order to creatively solve problems related to the development of projects.
6. Develop a work process that reflects effective resource management for constructing and organizing a workable project (e.g. time, workload, information and other resources).

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 2018 Character I
Academic Dean: Anna Mathis
Requisites: DIGD 2010, DRAW 2911, DRAW 2905
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	35	45	0	0

Course Description

In this course, students will explore the many aspects of character creation and development. Students will use shape and form language to convey aspects of visual design and build on their understanding of modeling for the purpose of animation.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Design 3D characters with consideration given to movement and animation.
2. Model a character based on reference material.
3. Create maps and textures for 3D characters.
4. Analyze and apply aesthetic concepts with regards to character design.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3000 Modeling and Texturing III
Academic Dean: Anna Mathis
Requisites: DIGD 2010
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
40	50	90	0	0

Course Description

In this course, students will explore 3D production techniques in order to construct an asset package for use in other applications. They will also perfect their own personal workflow.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Produce modular assets with a focus on reusability and versatility.
2. Understand limitations of resolution in regards to pixel density.
3. Perfect a personalized workflow with a focus on both speed and accuracy.
4. Understand and adapt to variables and deadlines.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy:

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3043 Character II
Academic Dean: Anna Mathis
Requisites: DIGD 2018
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

Students will take the concepts learned in Character I and apply them to a custom character. Students will be guided through the process to create the character, including textures, UV's and retopology.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Prepare a complete rig for bipedal characters.
2. Employ techniques to convey purpose in an animated character.
3. Evaluate different solutions to animation issues and determine which best suit the specific needs of the project.
4. Produce an accurate weight paint map to control a 3D character.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3038 Advanced Animation
Academic Dean: Anna Mathis
Requisites: DIGD 2011
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
40	50	90	0	0

Course Description

In this course, students will create a short animated piece, taking it along all the developmental stages from conception, scripting, and storyboarding to rigging, lighting, and rendering.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Use their knowledge of visual communication to conceptualize an effective animated piece.
2. Create a plan for setting up a scene that will incorporate lighting and allow for motion and other changes over a specific time period.
3. Build, light, and rig a scene as part of an animated piece.
4. Make informed choices about rendering an animated piece.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3042 3D Fashion Design
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course, students will explore the fundamentals of an industry-standard software used for virtual clothing. They will learn to create virtual 3D garments on characters and then animate. They will also develop a personal design aesthetic and create a variety of designs used for their current workflow. In addition, peer presentation and critical visual analysis are emphasized.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Create digital files of simple 3D fashion designs that can be exported for your workflow.
2. Import designs/sketches as templates by setting up real world measurements and work spaces.
3. Ensure materials have practical viability in addition to a pleasing aesthetic.
4. Explore clothing manipulations and design concepts to strengthen their ability to adapt different fashion styles.
5. Demonstrate professionalism in the classroom

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3050 3D Production
Academic Dean: Anna Mathis
Requisites: DIGD 3000
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
40	50	90	0	0

Course Description

In this course, students will be implementing their production plan created in 3D digital design research. Students will be taking this hands-on approach to refine their work flows and build a familiarity with working with time management software.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Plan and execute a large scale personal project, complete with milestones and deadlines and be able to adjust as necessary
2. Meet production deadlines to ensure project completion
3. Develop and perfect personal workflow in creating 3D objects.
4. Generate work that reflects initiative, creativity, adaptability and personal style.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3051 Character III
Academic Dean: Anna Mathis
Requisites: DIGD 3043
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course students will apply the their knowledge of rigging in the unreal engine to create control rigs to animate in engine for cinematics and gameplay workflows

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Prepare a complete control rig within the Unreal Engine,
2. Employ techniques to animate and control characters for use in both cinematic and game design applications.
3. Evaluate different styles of rig configurations to determine what fits the needs of the project.
4. Explore the animation pipeline within Unreal, for both cinematic and traditional animation solutions.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: DIGD 3041 3D Guided Research and Inquiry
Academic Dean: Anna Mathis
Requisites: DIGD 3000, DIGD 3040
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
5	40	45	0	0

Course Description

In this course, students will design and develop individual research projects that integrate key concepts and techniques from their 3D Digital Design studies, aligned with their personal artistic career goals. In consultation with the instructor, students will draw on knowledge gained from previous courses, self-directed research, and guided learning to create projects that reflect their unique interests. The course will also provide opportunities for students to present their work, participate in critiques, and display their projects, encouraging a collaborative and reflective learning experience.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Explain and discuss the types of projects that are relevant to their personal career goals.
2. Research industry related topics to discover current and effective production solutions.
3. Evaluate and make use of time and project management tools to organize their personal project with milestones and deadlines.
4. Critically evaluate the information, techniques and conclusions that are encountered during the research of the project.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy:

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Pass/fail grading with pass mark of 60%.

Course Code/Title: DIGD 3052 Digital Imaging
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
20	25	45	0	0

Course Description

In this course, students acquire, manipulate and create digital imagery by utilizing the basic tools and techniques for pixel based imagery. They further enhance their imagery by integrated pre-existing work with newly created work. In addition, they format images for various purposes and media destinations while exploring the creative possibilities that pixel-based imagery provides.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Use appropriate software applications for the creation, correction, retouching and manipulation of digital images.
2. Use the elements and principles of design to create pixel-based artwork.
3. Demonstrate an understanding of digital painting.
4. Develop a personal methodology for constructing and organizing a workable document that reflects effective source management.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: CCAR 3220 Preparing for a Career in 3D Digital Design
Academic Dean: Anna Mathis
Requisites: DIGD 2005
Nominal/Scheduled Hours: 90/45
Credits: 3

Lecture	Studio	Homework	Independent Study	Practicum
35	10	45	0	0

Course Description

In this course, students will develop an understanding of the 3D marketplace and how to shape their place in it. Students will study market trends and freelance best practices. They will also build portfolios.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Develop the personal and interpersonal skills needed to function as an employee or as an independent business entity.
2. Develop time management skills and self-direction.
3. Understand how to price labour and assets.
4. Showcase their work professionally in an online portfolio platform.
5. Demonstrate professionalism in the classroom.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.

Course Code/Title: INST 3902 Senior Practicum
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 180/0
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
0	0	0	0	180

Course Description

In this course, students are given the opportunity to work within a business or organization. They develop a professional level of conduct as they further their interpersonal workplace skills. In addition, they actively participate in the specialized activities of their practicum.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Display a professional level of conduct by maintaining an appropriate attitude in a business/organization related to their field of study.
2. Articulate the pros and cons of working within a business/organization with a practical understanding of their professional field.
3. Exhibit a positive work ethic by being fully engaged in their placement and displaying effective work habits.
4. Successfully manage and identify the complex and diverse needs related to their specialized field.
5. Compile a portfolio of samples/photographs of work completed during the practicum subject to the permissions/restrictions of the host company.

Student Attendance And Participation Policy

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Pass/fail grading with pass mark of 60%.

Course Code/Title: INST 3910 Senior Project: 3D Digital Design
Academic Dean: Anna Mathis
Requisites: None
Nominal/Scheduled Hours: 180/90
Credits: 6

Lecture	Studio	Homework	Independent Study	Practicum
30	60	0	90	0

Course Description

In this course, students produce a significant piece or series that becomes the focal point of their portfolio. They submit a proposal that determines the form and scope of their final project. This project requires students to integrate their creative abilities, design knowledge and personal aesthetics with technical prowess.

Course Learning Outcomes

Upon the successful completion of this course, students will have demonstrated the ability to:

1. Exhibit originality and personal creativity by creating a singular or series-based portfolio piece that forms the nucleus of their portfolios.
2. Display an ability to work independently while self-managing a project from concept to completion of professional size and scope.
3. Conduct research of current trends and/or a product's viability in a proposed studio project.
4. Synthesize personal creative abilities and aesthetic sensibilities with design knowledge and technical skills in the creation of professional-level work.
5. Self-evaluate and assess through critical analysis and comparison to existing work in the professional marketplace.

Student Attendance And Participation Policy:

All students are expected to attend and participate in every class, studio, work practicum and other course activity.

Evaluation Plan

The evaluation plan for each specific medium is provided on the Learning Experiences Outlines document. No single project will exceed 35% of the final grade.

Grading Basis: Graded with pass mark of 60%.