

COURSE NAME: GDD500 User Interface Design

Credit Value: 4
Total Course Hours: 56
Prerequisite Course(s): None
Corequisite Course(s): None

COURSE DESCRIPTION

A well designed user interface is critical to ensuring a smooth user experience in your game. From seamless menu navigation to managing player inventories to visualizing important information necessary for understanding the state of the world, UI design is as much about what the designer chooses to display, as what they choose not to. Students will learn to design clean, elegant UI systems that deliver the information the player needs in a clear, concise, and clutter-free way. Students will also learn animation and tweening techniques that can add life and personality to their user interfaces.

LAND ACKNOWLEDGEMENT

Canadore College resides on the traditional territory of the Anishinaabeg and within lands protected by the Robinson Huron Treaty of 1850. This land is occupied by the people of Nipissing First Nation, Treaty #10 in the Robinson Huron Treaty of 1850 since time immemorial.

PLAR INFORMATION

This course is not eligible for Prior Learning Assessment and Recognition.

COURSE LEARNING OUTCOMES

Upon completion of this course, the student will have reliably demonstrated the ability to:

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| <p>1.0 Analyze the fundamentals of user interface design.</p> <ul style="list-style-type: none">1.1 Discuss how to understand the user, as well as their expectations.1.2 Discuss ways in which to create familiarity and consistency in user interface design.1.3 Discuss how to efficiently design a user interface system for ease of navigation.1.4 Discuss how to guide user behaviour with clear, readable design patterns.1.5 Discuss how to use key features to catch the attention of a player.1.6 Discuss ways in which information and options can be minimized in order to create a simple, easy to understand design. <p>2.0 Demonstrate ability to set up a user interface (UI) system in a game engine.</p> <ul style="list-style-type: none">2.1 Demonstrate ability to create a UI canvas, discuss and understand its properties.2.2 Demonstrate ability on creating common UI elements, such as buttons, input fields, radio buttons, dropdowns, etc. | <ul style="list-style-type: none">2.3 Discuss the practical application of anchoring UI elements.2.4 Discuss ways in which to create scalable UI systems for multiple resolutions, screens, etc.2.5 Discuss ways in which to cleanly structure UI hierarchies. <p>3.0 Demonstrate ability to implement scripting to extend UI functionality.</p> <ul style="list-style-type: none">3.1 Demonstrate ability to create callback events for button click states.3.2 Demonstrate ability to read, set input field values.3.3 Discuss common input devices, as well as how to create input management systems to handle multiple input options (keyboard, mouse, joystick, etc).3.4 Demonstrate ability to create multiple UI content panels, move between one panel and the next through scripting.3.5 Demonstrate understanding in how to trigger animations, audio, etc in a UI system. <p>4.0 Demonstrate understanding of how to add</p> |
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polish to UI systems.

- 4.1 Demonstrate ability to create and implement UI animations.
- 4.2 Describe how to augment UI systems by triggering audio events.
- 4.3 Demonstrate ability to create worldspace UI systems for further immersion into games.
- 4.4 Demonstrate ability to render 3d content on a 2d canvas.

5.0 Display ability to create art for UI systems.

5.1 Appraise the importance of font choice for readability, as well as stylistic fit.

5.2 Discuss recommended font sizes for legible information in a UI.

5.3 Appraise colour schemes for UIs, with a focus on strong colour choices for clarity.

5.4 Create a visual language that ties back to game theme.

5.5 Design elements that look correct at many different scales.

GENERAL EDUCATION

This is not a General Education course.

ESSENTIAL EMPLOYABILITY SKILLS OUTCOMES

This course contributes to the following Ministry of Colleges and Universities approved essential employability skills (EES) outcomes:

1. Communicate clearly, concisely, and correctly in the written, spoken, and visual form that fulfils the purpose and meets the needs of the audience.
4. Apply a systematic approach to solve problems
5. Use a variety of thinking skills to anticipate and solve problems
7. Analyse, evaluate, and apply relevant information from a variety of sources.
10. Manage the use of time and other resources to complete projects.

EXTERNAL COURSE ACCREDITATIONS AND CONDITIONS

There are no external accreditations or conditions identified for this course.

COURSE EVALUATION

Tests and Quizzes - 20%

Assignments - 40%

Labs / Studies - 40%

PROGRAM SPECIFIC GRADING

As per College Grading System

GRADING SYSTEM

A+: 90-100% B+: 77-79% C+: 65-69% D: 50-54% S - Satisfactory

A:	85-89%	B:	73-76%	C:	60-64%	F:	0-49%	I - Incomplete
A-:	80-84%	B-:	70-72%	D+:	55-59%			F- Repeat Course, included in GPA
								FS- Failure Supplemental
								FR- Repeat course, excluded from GPA

*For a complete chart of grades and descriptions, please see the Grading Policy.

LEARNING RESOURCES

No textbooks have been identified for this course.

Other Resources:

Katherine Isbister - Game Usability: Advancing the Player Experience - ISBN: 0123744474

Resources listed on the course outline support the achievement of learning outcomes, and may be used throughout the course to varying degrees depending on the instructor's teaching methodology and the nature of the resource.

Technology requirements - <https://www.canadorecollege.ca/BYOD>

The Harris Learning Library's staff can help you find resources to support your learning - www.eclibrary.ca

LEARNING ACTIVITIES

Learning activities: In Class instruction/discussion

Instructor demonstration

Individual hands-on practice

In-class assignments

DELIVERY MODE

This course may be delivered, in whole or in part, in a number of modalities, including in class, online, hybrid, in a synchronous or asynchronous manner or a combination thereof, as per accreditation and/or regulatory standards where appropriate.

RECORDING GUIDELINES

This class may be recorded by faculty of the College. Faculty will inform students when recording of the class commences and ceases. 'Recorded' means that the audio-visual and chat portions of the class will be recorded and then be stored on the College or vendor provider server. They will be made available to students, but only

for the express and sole use of those registered in this course. If you have any questions or concerns about this recording, please contact your instructor or the College's privacy officer at privacy.officer@canadorecollege.ca. Full recording guidelines can be found at: <https://cdn.agilitycms.com/canadore-college/academic-centre-of-excellence/Canadore%20Recording%20Guidelines.pdf>

ACADEMIC POLICIES

Canadore College is committed to the highest standards of academic integrity, and expects students to adhere to these standards as part of the learning process in all environments. The College's Academic Integrity policy seeks to ensure that all students understand their rights and responsibilities in upholding academic integrity and that students receive an accurate and fair assessment of their work. Please review the Academic Integrity policy (A-18) and other academic policies found on our website: <https://www.canadorecollege.ca/about/policies>.

COLLEGE POLICIES

- Protecting human rights in support of a respectful college community

For college policies please see: <http://www.canadorecollege.ca/about-us/college-policies>.

STUDENT SUCCESS SERVICES - Your Success Matters!

Student Success Services provides student-focused services to facilitate students' success in their studies. Staff provide support by reducing and/or removing educational-related barriers through individualized accommodations and supports to students with disabilities.

Please visit our webpage to learn more: <https://www.canadorecollege.ca/support/student-success-services> or look for our events on social media.

To connect with Student Success Services email studentsuccessnow@canadorecollege.ca or call 705.474.7600 ext 5205.

FIRST PEOPLES' CENTRE:

A culturally safe environment offering CONFIDENTIAL student focused services, drop in or make an appointment to access:

- One on one counselling
- Elder in residence program
- Peer tutoring
- Peer mentorship
- Lunch & learn workshops on study skills, self-care, life skills

- Learning Resource Centre

Drop by our offices at C254 College Drive, E101 Commerce Court or call 705 474 7600 Ext. 5961 College Drive / 5647 Commerce Court.

<https://www.canadorecollege.ca/experience/indigenous-student-experience>

WAIVER OF RESPONSIBILITY

Every attempt is made to ensure the accuracy of this information as of the date of publication. The college reserves the right to modify, change, add, or delete content.

HISTORICAL COURSE OUTLINES

Students use course outlines to support their learning. Students are responsible for retaining course outlines for future use in applications for transfer of credit to other educational institutions.