Effectively use: usability metrics; interaction design guidelines, principles,

Demonstrate the fundamentals behind designing and implementing user interfaces.

& theories; interaction styles; and affordances & natural mappings to make appropriate, well-founded interaction design decisions.



2b

3

UG

| -  | and role in software design and development.  | 9        |        | ,,,,    |        | ,      |        |    |
|----|---|----------|--------|---------|--------|--------|--------|----|
| 1a | Understand and express how interaction design relates to mental models.   |          | /      |         |        |        |        |    |
| 1b | Understand and state the five key usability metrics and how to record or capture them.  |          | /      |         |        | ı      |        | I  |
| 1c | Understand and describe: interaction design guidelines, principles, & theories; interaction styles; and affordances & natural mappings.   |          | /      |         |        | /      |        | /  |
| 2  | Understand and report on how humans behave and interact with the usoftware.   | ser inte | erface | s of re | al-wor | ld sys | tems a | nd |
| 2a | Conduct and document a real-world study of how a cohort of users responds to a particular user interface, including but not limited to capturing and prioritizing usability metrics and correlating results to mental models and interaction design theories. |          | /      |         |        | I      |        | /  |

| 3a | Know and understand how user interfaces are constructed.                                  |   |   |   | / |   |     | 1 |
|----|---|---|---|---|---|---|-----|---|
| 3b | Know and understand event-driven programming.   |   |   |   | / |   | - 1 |   |
| 3c | Know and understand the model-view-controller (MVC) paradigm.                             |   |   |   |   |   | +   | + |
| 3d | Break down a high-level user action into a sequence of lower-level user or system events. |   |   |   |   |   | +   | + |
| 4  | Follow academic and technical best practices throughout the course.                       |   |   |   |   |   |     |   |
| 4a | Write syntactically correct, functional code.   |   |   | / | / |   | 1   | / |
| 4b | Demonstrate proper separation of concerns, especially MVC.                                |   |   |   |   |   | /   |   |
| 4c | Write code that is easily understood by programmers other than yourself.                  |   |   | / | / |   | +   |   |
| 4d | Use available resources and documentation to find required information.                   | + | - | - | / | / | +   |   |
| 4e | Use version control effectively.  | + |   |   | + | / |     |   |
| 4f | Meet all designated deadlines.  | + | I | / | / | / | +   | I |