IT 161 Java Programming 1

Course Description: An introduction to the Java programming language. Topics include: data types, variables, basic command line input/output, decisions, loops, procedures, string manipulation, arrays, object-oriented development, event programming, and database programming.

Prerequisites(s): IT 101, IT-111 **Corequisite(s):** No corequisite

Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Lab Fee: 105	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: ☒Web	□ Hybrid	X Classroom
Semesters Offered: X Fall	X Spring	X Summer

Course Primary Text:

Title: Ivor Horton's Beginning Java	Edition: 7th
Author(s): Ivor Horton	
Publisher: Wrox Press	

Supplemental Materials:

None

Course Outcomes:

1	Know and understand how to write console and windows-based programs in Java.
2	Know and understand Java syntax.
3	Know and understand Java programming language constructs: decision statements, loops, procedures.
4	Know and understand object-oriented programming basics: classes, polymorphism, inheritance, and encapsulation.
5	Know and understand how to make windows forms and dialogs.
6	Know and understand how to add controls to forms and respond to events.
7	Know how to programmatically login and logout and how to programmatically read, add, edit and delete records in a database in a 2-tier environment with either MS Access or MS SQL Server as a backend.

Course Topics:

Week 1	Introduction to Java with SciTe. Includes and main. Output with print and printf.
Week 2	Review of decision statements and loops. User input from the keyboard.

Week 3	Procedures and arrays.
Week 4	Introduction to classes with encapsulation, inheritance and constructors.
Week 5	Classes continued. Test #1
Week 6	Strings.
Week 7	Introduction to forms and controls.
Week 8	Forms and controls continued. Events.
Week 9	Connect and disconnect from a database programmatically. Load a list from a database programmatically.
Week 10	Adding records programmatically to a database. Simple data validation. Test #2.
Week 11	Deleting and editing records in a database programmatically.
Week 12	Add, edit and delete again with more complex data types (e.g. dates, currency, formatted text) and validation with regular expressions.
Week 13	Add, edit and delete continued.
Week 14	The assignment form.
Week 15	The assignment form continued.

Methods of Evaluation/Assessment

Homework	60%
Quizzes	10%
Test #1	15%
Test #2	15%

Course Keeper: Robert Nields

Date Completed: 4/1/2019