



Graduate Course Syllabus

IT 511: Object-Oriented Application Development

Center: Online

Course Prerequisites

None

Course Description

This course provides a comprehensive introduction to the principles and practices of object-oriented software development and provides a foundation for developing quality software. Students develop skills in applying object-oriented concepts to solve software problems and implement solutions. The course also teaches the concepts and design of algorithms for problem solving and includes the topics of data structures as they are related to the algorithms that use them. The course provides the technical foundation necessary to handle the material covered in the subsequent IT courses.

Course Outcomes

- Employ suitable data types in object-oriented programs for addressing specific program requirements
- Apply algorithms using appropriate control structures for solving computational problems
- Implement methods that accept parameters and return expected results for addressing given program requirements
- Construct classes with relevant object attributes and behaviors for developing modular object-oriented solutions
- Utilize appropriate documentation techniques for articulating the purpose and behavior of object-oriented code for specific audiences

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, [MBS Direct](#), rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

zyBooks

To access your zyBooks resource, *Programming in Java: Early Objects*, complete the following steps:

1. Sign up at zybooks.zyante.com.
2. Enter the following zyBooks code: **SNHUIT511AY16-17**
3. Input your access key into the appropriate field.
4. Click **Subscribe**.

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions forum in Blackboard so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Final Project Review Quiz	1	15	15
Discussion	2	15	30
zyBooks Activities	7	35	245
Stepping Stone Labs	6	40	240
Final Project			
Milestones	2	60	120
Final Submission	1	350	350
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

Total Points: 1000				
Grade	Numerical Equivalent	Points	Points Equivalent	
			Lower	Upper
A	93-100	4.00	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
B	83-86	3.00	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
C	73-76	2.00	730	769
F	0-72	0.00	0	729
I	Incomplete			
IF	Incomplete/Failure*			
W	Withdrawn			

*Please refer to the [policy page](#) for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Introduction to Object-Oriented Programming <i>Programming in Java</i> (zyBooks), Chapter 1 (Sections 1.1–1.11) and Chapter 2 (Sections 2.1–2.3) 1-1 Activity: zyBooks 1-2 Discussion: Introduction and Experience (Non-graded) 1-3 Installation: NetBeans and “Hello, World!” 1-4 Final Project Review and Quiz
2	Introduction to Object-Oriented Programming Concepts <i>Programming in Java</i> (zyBooks), Chapter 3 (Sections 3.1–3.12) and Chapter 4 (Sections 4.1–4.8) 2-1 Activity: zyBooks 2-2 Stepping Stone Lab One: Pseudocode for Your Program
3	Data Types and Variables <i>Programming in Java</i> (zyBooks), Chapter 5 (Sections 5.1–5.10) 3-1 Activity: zyBooks 3-2 Stepping Stone Lab Two: Data Types
4	Control Structures: Conditionals <i>Programming in Java</i> (zyBooks), Chapter 6 (Sections 6.1–6.15) 4-1 Activity: zyBooks 4-2 Stepping Stone Lab Three: Branches
5	Control Structures: Loops <i>Programming in Java</i> (zyBooks), Chapter 7 (Sections 7.1–7.12) and Chapter 8 (Sections 8.1–8.5) 5-1 Activity: zyBooks 5-2 Stepping Stone Lab Four: Loops 5-3 Final Project Milestone One: Ingredient Class
6	Classes <i>Programming in Java</i> (zyBooks), Chapter 9 (Sections 9.1–9.4) and Chapter 10 (Sections 10.1–10.3) 6-1 Activity: zyBooks 6-2 Stepping Stone Lab Five: Recipe Class With Accessors and Mutators

7	Methods <i>Programming in Java</i> (zyBooks), Chapter 9 (Sections 9.6–9.9) 7-1 Activity: zyBooks 7-2 Final Project Milestone Two: Recipe Class
8	Inheritance <i>Programming in Java</i> (zyBooks), Chapter 11 (Sections 11.1–11.8) 8-1 Activity: zyBooks (Non-graded) 8-2 Stepping Stone Lab Six: RecipeBox Driver Application
9	The Collection Manager Program 9-1 Activity: Generating Javadoc (Non-graded) 9-2 Final Project Submission: Collection Manager Program
10	Extending the Code 10-1 Discussion: Researching an Advanced Topic

Attendance Policy

Online students are required to submit a graded assignment/discussion to Blackboard during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the [full attendance policy](#).

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU College of Online and Continuing Education Student Handbook

Review the [student handbook](#).

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns. We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services.

SNHU does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, citizenship, marital status, gender identity or expression, sexual orientation, veteran/military status, or genetic information in its programs and activities. Requests for disabilities accommodations within COCE should be directed to:

Disability Resource Center (DRC)

(866) 305-9430

(877) 520-8916 (fax)

drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns. We look forward to hearing from you.

Complaints regarding discrimination and accommodations should be directed to:

(603) 645-9664

(603) 645-9717 (fax)

adacompliance@snhu.edu

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic honesty policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU College of Online and Continuing Education Withdrawal Policy

Review the [full withdrawal policy](#).

Southern New Hampshire University Policies

More information about SNHU policies can be found on the [policy page](#).

Assessment Calibration and Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See [this document](#) for more information.