Adelphi · Syllabus ·

# CMIS 141 7981 Introductory Programming (2202)

**CMIS-141** 

Spring 2020 Section 7981 3 Credits 03/16/2020 to 05/10/2020



### 🚨 Faculty Contact

Richard Metz Richard.Metz@faculty.umuc.edu

# Course Description

(Not open to students who have taken CMIS 340. The first in a sequence of courses in Java.) Prerequisite: CMIS 102 or prior programming experience. Recommended: MATH 107. A study of structured and object-oriented programming using the Java language. The goal is to design, implement, test, debug, and document Java programs, using appropriate development tools. Projects require the use of algorithms, simple data structures, and object-oriented concepts. Students may receive credit for only one of the following courses: CMIS 141, CMIS 141A, or CMSC 130.

### Course Introduction

In this course, we will introduce you to the design and implementation of programs using the object-oriented programming language Java. We will begin by showing you how to create, compile, and execute simple programs using the Java software developer's kit (SDK). We will then introduce branching and looping structures and show you how to create subroutines that are referred to as methods in Java. After working with arrays to store and manipulate data, we will end with a discussion of object-oriented concepts, including classes. Throughout the course, we will cover good software engineering procedures as well as ethical issues.

Note: This course is identified as a prerequisite for another course at UMUC. Successful completion of this course is required to advance to the next course in a sequence. A grade of Withdrawal (W), Failure for non-attendance (FN), Failure (F) or Incomplete (I) will not meet a prerequisite requirement. You may be barred from enrolling in or may be removed from courses for which you do not have the necessary prerequisites. Keep track of your progress in this course. If you are uncertain about your standing, consult with your instructor. You should also work with an academic advisor to be sure you are aware of your options and are meeting all necessary program requirements when planning your schedule.

### III Course Outcomes

After completing this course, you should be able to:

- design, implement, test, debug, and document programs that use basic data types and computation, simple I/O, conditional and iterative structures, and functions
- apply the techniques of structured (functional) decomposition to break a program into smaller pieces
- describe and use the mechanics of parameter passing
- · discuss and use primitive data types and built-in data structures
- · write clear and comprehensive program documentation

### **Course Materials**

Click to access your course materials information (http://webapps.umuc.edu/UgcmBook/BPage.cfm? C=CMIS%20141&S=7981&Sem=2202)

### \* Class Guidelines

#### **Faculty Information**

To locate information within your LEO classroom, log in and review your faculty member's information, which is found in the Start Here section of your classroom after clicking on the **Content** link.

#### **Contacting your Faculty Member**

You can use the Pager feature within the classroom to send a message to your faculty member. Click the Classroom Walkthrough Videos link below, and then click **The Pager** link, to view a how-to video on how to use the Pager function within the classroom:

#### Classroom Walkthrough Videos Link (http://www.umuc.edu/students/leo/videos.cfm)

Within the Content section of your classroom, view the Start Here section or Additional Course Information section within the Syllabus to learn more about contacting your faculty member.

#### **Contacting Advising or the Department**

If you have questions related to the course content or any of the graded deliverables, please contact the instructor. For questions and concerns related to advising, please write to ugadvising@umuc.edu or call 301-985-7000 (toll-free: 800-888-8682).

For other questions and concerns, you can contact your academic director by writing to computing\_dept@umuc.edu or by calling (240) 684-2840. Please be sure to mention the course name, course number, and your section number in the "Subject:" field of your email. Your email will be treated confidentially.

### Grading Information

This course consists of the following graded items:

Online discussions (weekly)	10%
Homework (4 @10%)	40%
Tests (timed, online, 3 @10%)	30%
Final Project	20%
Total	100%

#### **Definition of Academic Rigor**

UMUC defines academic rigor as the degree to which students demonstrate content mastery, application of critical thinking skills and adherence to UMUC's code of academic integrity.

This definition implies three components to academic rigor:

- 1. Content mastery to include the subject matter of the course as well as mastery of those core curriculum goals established for the course (for example, information literacy, effective writing).
- 2. Application of critical thinking skills to include the degree to which the student can present and defend original thinking on the subject matter, including synthesis and analysis of key concepts.
- 3. Academic integrity to include the degree to which student demonstrates academic honesty defined in UMUC's code of academic integrity.

#### **Participation**

By registering for a Web-based course, you have made a commitment to participate in course conferences as well as other online activities. Participation for this course is defined as proactive discussion in weekly discussion activities. This requires you to actively reflect on weekly readings and to develop original ideas in your responses. You are expected to demonstrate critical thinking and your understanding of the content in the assigned readings as they relate to the issues identified in the conference discussion.

You are expected to respond to the main discussion topic(s) each week and read and respond to other student posts to contribute additional knowledge to the class. Note that your online conference participation counts significantly toward your final grade. Interacting and responding to discussion items earlier in the week as opposed to the end of the week is encouraged and rewarded.

When communicating with others in this class always work to be respectful.

The rubric used to grade your online participation is shown below:

Criteria	Exceeds (5 points)	Meets (3-4 points)	Does not Meet (0-2 points)
Completeness of Submission	Responses thoroughly addressed all parts of the discussion question adding depth to the overall conversation.  Responses were clear and of the highest quality demonstrating mastery of writing.  References were properly cited.	Responses addressed some of the question but additional clarification and details would have strengthened the discussion.  Responses were well organized with rare spelling or grammar distractions.  References were properly cited.	No responses or responses were incorrect, or missing significant details.  No responses or responses were poorly written, disorganized with many spelling and grammatical errors.
Submitted on time	Initial responses submitted at least 3 days before the due date.	Initial responses submitted on or within 2 days before the due date.	No responses or responses submitted after the due date.
Interaction with Others	Responded to student posts providing additional contributions clearly supporting learning and successful accomplishment of assignments and classroom activities.	Responded to student posts providing additional contributions.	No responses to other students or responses to other students do not provide additional insight and are not substantive.

#### **Late Assignments**

Please notify the instructor via email if you plan to submit an assignment after the due date.

#### **Extra Credit**

There are no extra credit opportunities for the class.

# Project Descriptions

Descriptions and details for all homework and projects are listed in the assignments area found in the Navigation bar under assignments and in the content area.

11

# **Academic Policies**

#### **ACADEMIC INTEGRITY**

University of Maryland Global Campus (UMGC) has adopted a <a href="Philosophy of Academic Integrity">Philosophy of Academic Integrity (https://www.umgc.edu/current-students/learning-resources/academic-integrity/philosophy.cfm)</a> to guide the university's commitment to a culture of academic integrity and authentic education encompassing a set of dispositions and behaviors that are socially beneficial, educationally critical, and professionally necessary.

All members of the University community must maintain the highest level of integrity across the academic experience. For students, intellectually honest academic work represents independent analysis, acknowledges all sources of information that contribute to the ideas being explored, and ensures the ability to engage in life and work authentically. Your instructor is your primary resource for how to uphold the highest ethical standards in the context of this course's specific requirements.

Your instructor and other UMGC staff may use Turnitin or other technology resources to support the development and assessment of authentic student writing. To learn more about Turnitin, the feedback it provides, and your options regarding the inclusion of your work in the Turnitin database, visit University guides for Turnitin at <a href="mailto:sites.umgc.edu/library/librasources/turnitin.cfm">sites.umgc.edu/library/librasources/turnitin.cfm</a>

(https://sites.umgc.edu/library/libresources/turnitin.cfm) and

https://sites.umgc.edu/library/libresources/turnitin.cfm#studentcopyright

(https://sites.umgc.edu/library/libresources/turnitin.cfm#studentcopyright).

Additional resources to support you in authentic learning are available at <a href="umgc.edu/academicintegrity">umgc.edu/academicintegrity</a> (<a href="https://www.umgc.edu/current-students/learning-resources/academic-integrity/index.cfm">https://www.umgc.edu/current-students/learning-resources/academic-integrity/index.cfm</a>).

#### **CLASSROOM CIVILITY**

Students are expected to work together cooperatively, and treat fellow students and faculty with respect, showing professionalism and courtesy in all interactions. Please review the Code of Civility for more guidance on interacting in UMGC classrooms: <a href="https://www.umgc.edu/students/support/studentlife/conduct/code.cfm">https://www.umgc.edu/students/support/studentlife/conduct/code.cfm</a> (https://www.umgc.edu/students/support/studentlife/conduct/code.cfm).

#### **POLICIES AND GUIDELINES**

UMGC is committed to ensuring that all individuals are treated equally according to Policy 040.30 <u>Affirmative Action, Equal Opportunity, and Sexual Harassment (https://www.umgc.edu/administration/policies-and-reporting/policies/administration-policies/affirmative-action-and-equal-opportunity.cfm)</u>.

Students with disabilities who need accommodations in a course are encouraged to contact the Office of Accessibility Services (OAS) at <a href="mailto:accessibilityservices@umuc.edu">accessibilityservices@umuc.edu</a>, or call 800-888-8682 or 240-684-2287.

The following academic policies and procedures apply to this course and your studies at UMGC.

150.25	Academic Dishonesty and Plagiarism (https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/dishonesty-plagiarism.cfm) - The University expects all members of the university community—students, faculty, and staff—to share the responsibility and authority to report known acts of academic misconduct. Report suspected academic misconduct to your instructor. All cases of academic misconduct will be addressed in accordance with Policy 150.25.  This policy also states that faculty may determine if the resubmission of coursework from previous classes (whether or not taken at UMGC), partially or in its entirety, is acceptable or unacceptable. Faculty communicate these expectations to students in writing. If you are unclear about the reuse of your prior work, consult with your instructor.
151.00	Code of Student Conduct (https://www.umgc.edu/administration/policies-and-reporting/policies/student-affairs/code-of-student-conduct.cfm)

170.40	The following policies describe the requirements for the award of each degree:
170.41 170.42	Degree Completion Requirements for the Graduate School(https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/graduate-school-degree-completion-requirements.cfm)
170.42	<u>Degree Completion Requirements for a Bachelor's Degree(https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/bachelors-degree-completion-requirements.cfm)</u>
	Degree Completion Requirements for an Associate's Degree(https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/associates-degree-completion-requirements.cfm)
170.71	Policy on Grade of Incomplete (https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/grade-of-incomplete-policy.cfm) - The mark of I is exceptional and considered only for certain courses. Students who have completed 60% of their coursework with a grade of B or better for graduate courses or C or better for undergraduate courses and request an I before the end of the term. The mark of I is not available for noncredit courses.
170.72	Course Withdrawal Policy (https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/course-withdrawal.cfm) - Students must follow drop and withdrawal procedures and deadlines available ahttps://www.umgc.edu/(https://www.umgc.edu/) under Academic Calendar.
130.80	Procedures for Review of Alleged Arbitrary and Capricious Grading(https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/capricious-grading-review.cfm) – appeals may be made on final course grades as described herein.
190.00	Intellectual Property (https://www.umgc.edu/administration/policies-and-reporting/policies/research/intellectual-property.cfm) - All university faculty, staff, and students must comply with University guidelines on the use of copyrighted material. Uploading UMGC or faculty copyrighted material without authorization degrades and corrupts the integrity of the teaching and learning experience and is a potential violation of UMGC policy and copyright law. You must obtain permission to post UMGC or other's copyrighted material to third-party websites, including social learning network sites. UMGC reserves the right to take appropriate action to remove copyrighted material uploaded without authorization.
205.06	Calculation Of Grade-Point Average (GPA) for Inclusion on Transcripts and Transcript Requests (https://www.umgc.edu/administration/policies-and-reporting/policies/academic-affairs/grade-point-average-calculation-for-inclusion-on-transcripts-and-transcript-requests.cfm) - Note: Undergraduate and graduate courses have different Grading Policies. See Course Syllabus for Grading Policies.
270.00	Acceptable Use (https://www.umgc.edu/administration/policies-and-reporting/policies/fiscal-and-business-affairs/acceptable-use.cfm) - The security of the online classroom is critical to ensuring a strong culture of academic integrity and authentic education at the University. It is a violation of the University's policies for anyone to share logon, password, and any other secure information about a UMGC online account, including credentials required to access the online learning environment.

#### **GRADING**

According to UMGC's grading policy, the following marks are used:

	Undergraduate	Graduate
Α	90-100	90-100
В	80-89	80-89
С	70-79	70-79*
D	60-69	N/A**
F	59 or below	69 or below

FN	Failure-Non attendance	Failure-Non attendance
G	Grade Pending	Grade Pending
Р	Passing	Passing
s	Satisfactory	Satisfactory
U	Unsatisfactory	Unsatisfactory
ı	Incomplete	Incomplete
AU	Audit	Audit
w	Withdrew	Withdrew

<sup>\*</sup> The grade of "B" represents the benchmark for graduate courses. Students must maintain a Grade Point Average (GPA) of 3.0 or higher. Classes where final grade of C or F places a student on Academic Probation must be repeated.

#### **COURSE EVALUATION SURVEY**

UMGC values its students' feedback. You will be asked to complete an online evaluation toward the end of the term. The primary purpose of this evaluation process is to assess the effectiveness of classroom instruction in order to provide the best learning experience possible and make continuous improvements to every class. Responses are kept confidential. Please take full advantage of this opportunity to provide your feedback.

#### LIBRARY SUPPORT

Extensive library resources and services are available online, 24 hours a day, seven days a week at <a href="https://sites.umgc.edu/library/index.cfm">https://sites.umgc.edu/library/index.cfm</a> (https://sites.umgc.edu/library/index.cfm) to support you in your studies. The UMGC Library provides research assistance in creating search strategies, selecting relevant databases, and evaluating and citing resources in a variety of formats via its Ask a Librarian service at <a href="https://www.umgc.edu/library/libask/index.cfm">https://www.umgc.edu/library/libask/index.cfm</a> (<a href="https://www.umgc.edu/library/libask/index.cfm">https://www.umgc.edu/library/libask/index.cfm</a>).

#### **EXTERNAL LINK DISCLAIMER**

This course may contain links to external sites neither owned nor maintained by UMGC. UMGC bears no responsibility for the accuracy, legality, or content of external sites or for that of subsequent links. In addition, the terms of use, security policies, and privacy policies may differ from those of UMGC. Contact the external site for answers to questions regarding its content, terms of use, and policies.

#### **LEARNING MANAGEMENT SYSTEM SUPPORT**

Those requiring technical assistance can access Help@UMGC Support directly in LEO under the Help menu. Additional technical support is available 24 hours a day, seven days a week via self-help and live chat at <a href="https://www.umgc.edu/help/">https://www.umgc.edu/help/</a> or by phone toll-free at 888-360-UMUC (8682).

#### **SYLLABUS CHANGES**

All items on this syllabus are subject to change at the discretion of the Instructor and the Office of Academic Affairs.

# 🛗 Class & Assignment Schedule

SESSION	TOPICS	ASSIGNMENTS

<sup>\*\*</sup> UMGC does not award the grade of D in graduate courses.

Week 1 Mar 16 to 22	<ul> <li>Introductions</li> <li>Environment Set-up</li> <li>Hello, World</li> <li>Language Fundamentals</li> </ul>	<ul><li>Week 1 discussions</li><li>Lab 1</li><li>Test 1</li></ul>
Week 2 Mar 23 to 29	Standard I/O     Selection Statements	<ul><li>Week 2 discussions</li><li>Lab 2</li><li>Homework 1</li></ul>
Week 3 Mar 30 to Apr 5	<ul><li>Loops</li><li>Nested Loops</li></ul>	<ul><li>Week 3 discussions</li><li>Lab 3</li><li>Test 2</li></ul>
Week 4 Apr 6 to 12	Methods     Objects	<ul><li>Week 4 discussions</li><li>Lab 4</li><li>Homework 2</li></ul>
Week 5 Apr 13 to 19	<ul><li>Arrays</li><li>ArrayLists</li></ul>	<ul><li>Week 5 discussions</li><li>Lab 5</li><li>Test 3</li></ul>
Week 6 Apr 20 to 26	<ul> <li>Classes</li> <li>Class Methods and Variables</li> </ul>	<ul><li>Week 6 discussions</li><li>Lab 6</li><li>Homework 3</li></ul>
Week 7 Apr 27 to May 3	<ul><li>Strings</li><li>StringBuffers</li><li>Command Line Arguments</li></ul>	<ul><li>Week 7 discussions</li><li>Lab 7</li><li>Homework 4</li></ul>
Week 8 May 4 to 10	• File I/O	<ul><li>Week 8 discussions</li><li>Lab 8</li><li>Final Project</li></ul>

Students can access their complete list of assignments and their corresponding due dates within the Assignments section of the classroom by navigating to the Assignments section of the class from the main navigation bar. Follow the link below, and then click Assignments, for a video demonstration on how to utilize this feature.

<u>Classroom Walkthrough Videos Link (http://www.umuc.edu/students/leo/videos.cfm)</u>

Students also have access to a calendar tool on the course homepage within the classroom.