COURSE SYLLABUS
Fall 2022
August 22 – December 9, 2022
Tuesday & Thursday 10:00am – 11:15pm BEF205
Programming I
CS20103-01
Computer Science

Instructor: **Alan Cook**
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E-mail: acook@rio.edu
Office: Bob Evans Farm Hall – Room 230

Office Hours: *Please schedule an appointment online:* 2526.us/meet
at least 8 hours in advance to ensure availability

M/W @BEF230	3:45-4:45p *[schedule in advance at 2526.us/meet]*
T/R @Meigs Ctr.	03:45p-04:15p
T/R via MS Teams or phone	01:30-02:30p *[schedule in advance at 2526.us/meet]*

Dept. Secretary: 740-245-7373   Office Fax: 740-245-7110
McArthur Ctr.   740-645-7993   Meigs Center: 740-992-1880   Jackson Ctr.   740-288-0284

COURSE DESCRIPTION: This course introduces fundamental concepts of programming and problem solving from an object- oriented perspective. Topics include algorithm design, simple data types, control structures, classes, arrays, and strings. The course emphasizes good programming designs and styles, coding, and debugging techniques. A programming language that supports object-oriented paradigm will be used.

PREREQUISITES: MTH 11403

CREDIT HOURS: 3 credit hours

TEXTBOOK AND OTHER REQUIRED MATERIALS:

REQUIRED: CENGAGE MINDTAP ACCESS
MindTap access/eBook with purchase of "Cengage Unlimited"
<<Complimentary trial access is provided at beginning of course>>

Software: Various open-source products

Access to Rio's Canvas Learning Management System:
http://rio.intructure.com

MindTap system requirements: www.tinyurl.com/mindtap-faq
[e.g., screen resolution must be 1024x768 or larger]

Face-to-Face Students Only:
Flash drive (2GB, or larger) for use with campus computers
Headphones/earphones for online training during classroom time

PROGRAM OUTCOMES: The following outcomes have been adopted for the degree program for which this course is required:

1. Students will use critical thinking and logic skills to formulate and solve problems related to programming and software development.
2. Students will be able to write code in a common programming languages such as Java, C, or Python.
3. Students will be able to explain ethical behavior as it relates to programming and operating computers.
4. Students will be able to Explain fundamental concepts relating to computer operating systems, software, hardware, and architecture.
5. Analyze, design, develop software projects and web applications. The student should be able to explain the different aspects of the software life cycle.
6. Analyze, design, develop, and administer a database system.

COURSE OUTCOMES: The following outcomes have been adopted for this course. *All outcomes* listed below have direct relevance to course material. Upon completion of this course students are expected to:

1. The process of problem solving, writing programs, and the software life cycle.
2. Program syntax and error correction.
3. The importance of programming outside the box.
4. Object Oriented programming techniques.
5. How to test and debug programs.
6. How to write good documentation and programming styles that adhere to standards.

TOPICAL/CLASS OUTLINE:

DATE	Topic/Reading	Assignments
W1 8/23 8/25	 Review syllabus Canvas/MindTap	Follow Canvas/MindTap for list of assignments
W2 *8/30* 9/1	*1: Intro to Python* What is computation? L1.1/2 Shell/Simple Scripts	
W3 9/6 9/8	*Univ closed: Labor Day Monday* L1.3 Python Syntax L1.4 User Input/Comments/Indents	
W4 9/13 9/15	*2: Data Types* L2.1 Numerical Data L2.2 Strings	
W5 9/20 *9/22*	 L2.3 Lists L2.4 Booleans	
W6 9/27 9/29	*3: Control Statements* L3.1/2 Control Statements/IF L3.3/4 While Statement/vs. IF	
W7 10/4 *10/6*	 L3.5/6/7 Loops/For/Range Function 	
W8 10/11 *10/13*	*MidTerm Week* L3.8/9 Nesting/Breaking Loops 	
W9 10/18 10/20	4: Functions L4.1/2/3 Functions L4.4 Anonymous Functions	
W10 10/25 10/27	*5: Lists and Tuples* L5.1/2 List Syntax/Methods L5.3/4/5/6 Comprehensions/Tuple	
W11 11/1 11/3	*6: Dictionaries and Sets* L6.1-3 L6.4-6	
W12 11/8 11/10	*7: Object Oriented Programming* L7.1-3 L7.4-7	
W13	*8: Modules, Packages, File Ops*	

11/16	L8.1-3	
11/18	L8.4-7	
W14	*Thanksgiving Week*	
11/22	*Workday: catch up on work*	
	University closed Wed-Fri	
W15	*9: Error Handling*	
11/29	L9.1/2	All work must be submitted
12/1	L9.3/4	by Friday NOON
W16	Finals Week	
		Final Projects Due
	Finish Final Projects	by Thursday midnight

GRADING POLICIES/TESTING/ASSIGNMENTS/ATTENDANCE/EXPECTATIONS

Grade calculation	% of Grade	Grading Scale		
Participation	20%	A	=	93 – 100%
Lab Activities	30%	A-	=	90 – 92%
Reflections	10%	B+	=	87 – 89%
Module Quizzes	15%	B	=	83 – 86%
Module Lab Assessments	15%	B-	=	80 – 82%
Final Project(s)	10%	C+	=	77 – 79%
TOTAL	=100	C	=	73 – 76%
		C-	=	70 – 72%
		D+	=	67 – 69%
		D	=	63 – 66%
		D-	=	60 – 62%
		F	<	60%

Midterm: The midterm grade is only an indicator of progress in the course.

Exams: Exams for each unit are online. The final exam may include projects.

Assignments: Assignments must be original work and duplicating/copying files will result in disciplinary actions as per the academic honesty policy in the student handbook. Assignments may be class activities and/or online Canvas and/or MindTap projects. Students should follow the syllabus and Canvas to keep up with weekly assignments (late work may not be accepted or may result in a loss of points/percentage).

Scores will be weighted according to syllabus to calculate the total course grade. MindTap/Canvas may show a percentage grade, but may not include all course work (participation, classroom activities, and the final project), missing work, and may not indicate your total course grade that will be calculated off-line at the conclusion of the course.

Course files may be individualized and available for download from Canvas or MindTap.

Participation: Classroom participation for face-to-face classes may be graded on classroom activities while online student participation may be graded on completion of online assignments. Face-to-face activities may be required to be completed at the conclusion of the class time period. Online students may be required to complete activities as indicated on Canvas/MindTap.

Free access is provided to all students to MindTap at the beginning of course, so all students need to sign in to Canvas and log into the MindTap ebook. Failure to attend the face-to-face course and/or log into MindTap during the beginning of the online course may result in a student being reported for non-attendance.

Face-to-Face Lab Behavior: Phones should be set to vibrate or silent to allow students to receive emergency notifications without disruption of the classroom. Devices such as laptops, smartphones, Internet-connected devices and university provided computers should be used ONLY to enhance the course (such as looking up information for discussion/in-class activities, etc.) and NOT become a distraction to the learner or other students in the classroom (texting, etc.). Headphones/earphones (even just in one ear) or non-religious/unapproved headgear (hats or hoods,

etc.) that cover ears should not be used/worn during classroom instructional activity time. Students should be aware of and respect posted policies in lab classrooms, such as "no food and drinks". Students who are not engaged in the face-to-face classroom may forfeit participation points.

We are Rio. Learning, living, and working in the community are vital to our Mission at URG/RGCC. The COVID-19 pandemic and the risks posed to our community and the world require that each of us observe heightened well-being and safety measures in the coming academic year. Your safety, health, and well-being, as well as that of our faculty, staff, and guests to campus are our primary concern, and we want to support you in any way that we can. We have expectations that you act responsibly in order to mitigate risk to others. We cannot fully eliminate risk—no one can; however, we can and should mitigate risk. Keep in mind that wearing masks on campus is mandated and that social distancing should be maintained.

Email Communication: To avoid messages from being filtered/not delivered, all student and faculty communication should be restricted to official university supplied email addresses. If you need a call back, please include a phone number in your email message. Email messages should always be professional and include your full name and course information (course and section #).

Incomplete Grades: Student must meet the requirements for an incomplete grade and submit a completed application (available from the registrar) for an incomplete grade, including an explanation for the request and documentation. The university charges a fee for incomplete grades. The application should be submitted to the instructor before the beginning of finals week.

Course Survey: Student are expected to complete a course evaluation survey before the end of the semester through the online evaluation system. Course survey information is requested before the end of the semester, but survey results are withheld from instructors until after grades have been submitted. Course evaluations are necessary for the school's accreditation and assist with the institutional assessment and future planning.

ACADEMIC SUPPORT SERVICES

ADA Statement - Accommodations and Student Accessibility Services
Students who wish to receive reasonable accommodations due to a qualifying ADA disability, should contact the Office of Accessibility to learn more about requesting accommodations. Students must be registered with the Office of Accessibility in order to receive accommodation services. Those interested in learning more about requesting accommodations or who are not certain whether they have a qualifying disability may contact Stephanie Alexander, PhD, Director of Academic Support Services and Student Accessibility at: accessibility@rio.edu or (740) 245-7366. The Office of Accessibility is located in the Academic Support Services Suite, Suite 08, on the ground floor of the Jeanette Albiez Davis Library. The Office of Accessibility offers virtual, phone, and face-to-face appointments.

Tutoring and Writing Assistance: The Jenkins Academic Center offers free tutoring in many subjects as well as writing assistance, basic skills instruction, and an open computer lab to all Rio students. To schedule a tutoring appointment or to learn more about tutoring services, contact Kelsey Doughman, MEd (tutoring coordinator and professional math tutoring specialist) at (740) 245-7176 or jenkinscenter@rio.edu. To schedule a writing assistance appointment or to learn more about using the Jenkins Center "OPS" (online paper service), contact Adam Hollingshead, MA (professional writing specialist) at (740) 245-7333 or jenkinscenter@rio.edu. The Jenkins

Academic Center is located on the ground floor of Davis Library. The Jenkins Academic Center offers tutoring and writing assistance in virtual, phone, and face-to-face formats.

BRAINFUSE: A link to Brainfuse, an online tutoring and writing assistance service that is available 24/7 is available in all Canvas classrooms. To find the link, scroll down the navigational menu until you see the word "brainfuse." Click the word and you will be taken to a link that will take you to the service.

MENTAL WELLNESS SERVICES: As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Confidential mental health services are available to assist you with addressing these and other concerns you may be experiencing. Contact Brittany Franklin, Director of Rio Mental Wellbeing, at (740) 245-7439 or bfranklin@rio.edu. The office of Mental Wellbeing is located in Rhodes Student Center, room 118.

ACADEMIC HONESTY & INTEGRITY: As educational institutions, the University of Rio Grande and Rio Grande Community College seek to nurture a high standard of academic honesty and integrity in students, faculty, and staff. All persons are expected to present and represent their own original work and to fully and properly credit sources of information used in the preparation of their own original work. Any person committing an act of plagiarism, cheating, attendance fraud, or other form of academic dishonesty is subject to the fullest measure of consequences, including course failure and suspension. Repeated violations will subject the student to automatic academic suspension with failing grades for not less than one academic year. Failing grades assigned because of academic dishonesty will not be eligible for forgiveness under the Academic Policy.

FERPA: The University of Rio Grande and Rio Grande Community College are committed to fully respecting and protecting the rights of students under the Family Educational Rights and Privacy Act (FERPA). These rights generally include the right to inspect, review and seek amendment to the student's education records and the right to provide written consent before personally identifiable information from education records is disclosed. Under FERPA, students have the right to file a complaint with the US Department of Education concerning alleged failures to comply with FERPA. Please see the Student Records Confidentiality/Rights Under FERPA section of the Student Handbook for details and more information.

COPYRIGHT: Materials used in association with this course may be copyright protected. These items are provided for educational purposes and are intended for the use by only those students officially enrolled in the course. Individuals may not copy, duplicate, download, or distribute any of these items outside this course without first considering United States copyright law (Title 17, US Code) and Rio Grande's copyright-related policies.

WITHDRAWAL: See the Student Handbook for withdrawal information and the current university course schedule for last day during the semester to withdraw from course.

** This syllabus is not to be construed as a contract with the student and may be subject to change**

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2526.us/tour • Information meeting Wednesday, Sept 14 @4pm BEF207
Can't attend? RSVP and click "no but send info" for virtual meeting info