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| Jjjj | **COURSE OUTLINE**  nn | | | | | | | |
| 1 | Faculty | | | Faculty of Science and Engineering (FSE) | | | | |
| 2 | Department | | | Computer Science and Engineering | | | | |
| 3 | Programme | | | B.Sc. in Computer Science and Engineering | | | | |
| **4** | **Name of Course** | | | Structured Programming Lab | | | | |
| **5** | **Course Code** | | | CSE 104 | | | | |
| **6** | **Trimester** | | | Summer 2021 | | | | |
| **7** | **Pre-requisites** | | | None | | | | |
| **8** | **Status** | | | Core Course | | | | |
| **9** | **Credit Hours** | | | 1.5 | | | | |
| **10** | **Section** | | | 211DA, 211DB, 211DC, 211DD, 211DE, 211EA, PC-211DA, PC-211DB | | | | |
| **11** | **Class Hours** | | | |  |  |  |  | | --- | --- | --- | --- | | **Section** | **Class Day** | **Class Hours** | **Venue** | | 211DA | Monday | 11:30 PM-03:00 PM | Online | | 211DB | Monday | 11:30 PM-03:00 PM | Online | | 211DC | Wednesday | 11:30 PM-03:00 PM | Online | | 211DD | Wednesday | 11:30 PM-03:00 PM | Online | | 211DE | Tuesday | 04:30 PM-06:00 PM | Online | | 211EA | Friday | 04:45 PM-06:00 PM | Online | | PC-211DA | Tuesday | 09:30 AM-12:30 PM | Online | | PC-211DB | Tuesday | 01:00 PM-04:00 PM | Online | | | | | |
| **12** | **Class Location** | | | Online | | | | |
| **13** | **Course website** | | | <https://classroom.google.com/c/MzU4MDcwMjIwMTU3?cjc=7twuynf> (211DA)  <https://classroom.google.com/u/1/c/MzU4MjE4MjM4NjE4> (211DB),  <https://classroom.google.com/c/MzU4MDcwMjIwMTgx?cjc=hpgqnhx> (211DC)  <https://classroom.google.com/u/1/c/MzU4MjE4MjM4Njk4> (211DD),  <https://classroom.google.com/u/1/c/MzU4MjE4MjM4NzM4> (211DE)  <https://classroom.google.com/u/0/c/MzU5MDQ0NjE1OTgw> (211EA),  [https://classroom.google.com/c/MzU5MzU5MTczNDk0?cjc=6kkjzro (PC-211DA)](https://classroom.google.com/c/MzU5MzU5MTczNDk0?cjc=6kkjzro%20(PC-211DA)),  [https://classroom.google.com/c/MzU5MzU5MTczNTA1?cjc=u4h3j3v (PC-211DB)](https://classroom.google.com/c/MzU5MzU5MTczNTA1?cjc=u4h3j3v%20(PC-211DB)) | | | | |
| **14** | **Instructor** | | | Mr. Humayan Kabir Rana (211DA, 211DC),  Md. Ahmed Iqbal Pritom(211DB, 211DD, 211DE),  Ms. Shamima Akter (211EA),  Mr. Ohiduzzaman Shuvo (PC-211DA),(PC-211DB) | | | | |
| **15** | **Contact** | | | humayan@cse.green.edu.bd (211DA, 211DC),  [iqbal@cse.green.edu.bd (211DB,211DD,211DE)](mailto:iqbal@cse.green.edu.bd%20(211DB,211DD,211DE)), [shamima\_akter@cse.green.edu.bd (211EA)](mailto:shamima_akter@cse.green.edu.bd%20(211EA)),  shuvo@cse.green.edu.bd (PC-211DA, PC-211DB) | | | | |
| **16** | **Office** | | | NA (due to online classes) | | | | |
| **17** | **Counselling Hours** | | | |  |  |  |  | | --- | --- | --- | --- | | **Section** | **Day** | **Counseling Hours** | **Venue** | | 211DA | Tuesday | 03:00 PM-06:00 PM | Online | | 211DB | Thursday | 11:00 AM-12:00PM | Online | | 211DC | Thursday | 06:00 PM-08:30 PM | Online | | 211DD | Thursday | 12:00 PM-01:00 PM | Online | | 211DE | Thursday | 02:00 PM-03:00 PM | Online | | 211 EA | Tuesday | 10:00 AM-11:30 AM | Online | | PC-211DA | Monday | 01:00 PM-04:00 PM | Online | | Wednesday | 01:00 PM-04:00 PM | Online | | PC-211DB | Monday | 09:30 AM-12:30 PM | Online | | | | | |
| **18** | **Text Book** | | | 1. Schildt, H (2000). The Complete Reference C, 4th Edition. McGraw-Hill. | | | | |
| **19** | **Reference** | | | 1. Kernighan, B. W., & Ritchie, D. M. (2006). The C programming language. Prentice Hall. 2. Kanetkar, Y. P. (2016). Let us C. BPB publications. 3. Video Tutorials on C for Beginners 4. <https://www.w3resource.com/c-programming-exercises/> 5. <https://blog.udemy.com/c-tutorial-learn-c-in-20-minutes/> | | | | |
| **20** | **Equipment & Aids** | | | Bring your notebook. Code Block software is installed in the respective laboratory computers. Do collect the software named “Code Block” for home practice. | | | | |
| **21** | **Course Rationale** | | | This course is all about the basics of all programming languages, and also the knowledge of initial software development. We all know that software is very essential for all devices, organization, institute, or company. And software is nothing but a package of programs. This course facilitates to gather knowledge about program, developing small software and will teach the students enough about the modern-world miracle. The course assumes students are familiar with programming covered by most introductory courses. | | | | |
| **22** | **Course Description** | | | Overview: data types, operators and expression; control structure: decision making and branching, decision making and looping, jumping statements; array and strings: linear array, multidimensional array and strings; managing input and output operations; user defined functions: defining, calling, declaring functions; user defined data types: structure and union; pointer, dynamic memory allocation and file handling; sound and graphics. | | | | |
| **23** | **Course Outcomes (CO)** | | | After completing this course students will be able to-  **CO1:** Demonstrate skills of structured programming concepts by developing programs for solving complex problems. [Cognitive]  **CO2:** Apply the acquired programming skills by writing a report on the developed programs for the given problems. [Psychomotor]  **CO3:** Identify the appropriate new structure programming concepts for solving a given complex problem. [Affective] | | | | |
| **24** | **Teaching Methods** | | | Lecture, Laboratory experiments, Project developments. | | | | |
| **25** | **Topic Outline** | | | | | | | |
|  | **Class** | **Topics or Assignments** | | |  | **Reading Reference** | **Activities** |
| 1 | Basic Structure and Syntax of C Programming Language | | |  | Lab. Manual, Experiment No. 1 | Laboratory  Experiment |
| 2 | Expressions | | |  | Lab. Manual, Experiment No. 2 | Laboratory  Experiment |
| 3 | Selection Statement | | |  | Lab. Manual, Experiment No. 3 (a) | Laboratory  Experiment |
| 4 | While and do-while Loop Control Structure | | |  | Lab. Manual, Experiment No. 3 (b) | Laboratory  Experiment |
| 5 | For Loop Control Structure | | |  | Lab. Manual, Experiment No. 4 | Laboratory  Experiment |
| 6 | Array and 2D array | | |  | Lab. Manual, Experiment No. 5 | Laboratory  Experiment |
|  | **Mid Term Exam** | | |  |  |  |
| 7 | User defined function | | |  | Lab. Manual, Experiment No. 6 | Laboratory  Experiment |
| 8 | String processing | | |  | Lab. Manual, Experiment No. 7 | Laboratory  Experiment |
| 9 | Structure | | |  | Lab. Manual, Experiment No. 8 (a) | Laboratory  Experiment |
| 10 | Pointer operations | | |  | Lab. Manual, Experiment No. 8 (b) | Laboratory  Experiment |
| 11 | Pointers & Arrays | | |  | Lab. Manual, Experiment No. 9 | Laboratory  Experiment |
|  | 12 | Final Term Examination (Quiz, Lab test, Viva, Project Presentation) | | |  |  | Quiz, Lab test, Viva, Project Presentation |
|  | | | | | | | | |
| **26** | **Assessment and Marks Distribution:** | | Students will be assessed on the basis of their overall performance in all the exams, quizzes, and class participation. Final numeric reward will be the compilation of (tentative):   * Class Attendance (AP) (10%) * Capstone Project Presentation & Viva (25%) * Continuous Lab Performance (CLP) (25%) * Lap Report (LR) (10%) * Lab Final (LF) (30%) | | | | | |
| **27** | **Assessment Methods of COs** | | Assessment methods of COs are given below:   |  |  |  |  | | --- | --- | --- | --- | |  | **Course Outcomes** | | | | **Assessment Methods** | **CO1** | **CO2** | **CO3** | | Continuous Lab Performance | 25% |  |  | | Lab Report, Class Attendance | 10% | 10% |  | | Capstone Project Presentation & Viva | 10% | 5% | 10% | | Lab Final | 30% |  |  | | **Total (100%)** | **75%** | **15%** | **10%** | | | | | | |
| **28** | **Mapping of Cos with PLOs** | | Mapping of Cos with program outcomes (Pos) are given below:   |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Program Outcomes (PLOs)** | | | | | | | | | | | | | | **Cos** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | | **CO1** |  | **√** |  |  |  |  |  |  |  |  |  |  | | **CO2** |  |  |  |  |  |  |  |  |  | **√** |  |  | | **CO3** |  |  |  |  |  |  |  |  |  |  |  | **√** | | | | | | |
| **29** | **Grading Policy** | | The following chart will be followed for grading. This has been customized from the guideline provided by the School of Engineering and Computer Science.   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **A+** | **A** | **A-** | **B+** | **B** | **B-** | **C+** | **C** | **D** | **F** | | 80 and above | 75-<80 | 70-<75 | 65-<70 | 60-<65 | 55-<60 | 50-<55 | 45-<50 | 40-<45 | <40 | | | | | | |
| **30** | **Additional Course Policies** | | 1. 1. Lab Reports:  Report on previous Experiment must be submitted before the beginning of new experiment. A bonus may be obtained if a student submits a neat, clean and complete lab report.  2. 2. Examination:  There will be a lab test and lab final exam both of which will be closed book.  3. 3. Unfair means policy:  In case of copying/plagiarism in any of the assessments, the students involved will receive zero marks. Zero Tolerance will be shown in this regard. In case of severe offences, actions will be taken as per university rule.  4. 4. Counseling:  Students are expected to follow the counseling hours posted. In case of emergency/unavoidable situations, students can e-mail me to make an appointment.  5. 5. Policy for Absence in Class/Exam:  If a student is absent in the class for anything other than medical reasons, he/she will not receive attendance. If a student misses a class for genuine medical reasons, he/she must submit an application with the supporting documents (prescription/medical report). He/she will then have to follow the instructions given by the instructor for make-up.  In case of absence in the mid/final exam for medical grounds, the student must also get his/her application forwarded by the head of the department before a make-up exam can be taken.  It is recommended that the students inform the instructor beforehand through mail if they feel that they will miss a class/evaluation due to medical reasons. | | | | | |
| **31** | **Additional Information** | | 1. Academic Calendar Summer 2021: http://www.green.edu.bd/academics/academic-calendar. 2. Academic Information and Policies: http://www.green.edu.bd/academics/academic-rules-a-regulations. 3. Grading and Performance Evaluation: http://www.green.edu.bd/academics/academic-rules-a-regulations. 4. Proctorial Rules: http://www.green.edu.bd/administrator/proctors-office. | | | | | |