CS 300: Programming Languages, Spring 2021
Department of Computer Sciences and Electrical Engineering
Marshall University

Course Information:
- Instructor: Dr. Cong Pu (Ph.D., Assistant Professor)
- Office: Important: All office hours should be held virtually during the COVID-19 pandemic unless face-to-face hours are approved by the department chair.
- Office Phone: (304) 696-6204
- Email: puc@marshall.edu
- Website: https://sites.google.com/site/congputh
- Class format: **Virtual Class** – Online Synchronous Activities Required. Refer To: WWW.MARSHALL.EDU/VIRTUAL
- **Virtual class meetings**: Tue/Thu, 12:30 p.m. – 1:45 p.m., **Microsoft Teams**
  - Class meetings are held live via Microsoft Teams, with instructors broadcasting lectures and leading classroom discussions at the specified class meeting day and time. (Sessions are recorded so students who do not have reliable access to broadband and/or other technical difficulties can watch the class at another time.)
  - To get familiar with Microsoft Teams, see https://www.marshall.edu/it/teams/
  - To join a virtual class meeting in Microsoft Teams, watch https://www.youtube.com/watch?v=BH6bSIwR0-4
- Technology assistance
  - If you have technical problems, please contact one or more of the following:
    - Blackboard Support (URL: www.marshall.edu/design-center/support-ticket/)
    - Marshall Information Technology (IT) Service Desk (Help Desk) (URL: http://www.marshall.edu/it/departments/it-service-desk/)
      - Huntington: (304) 696-3200
      - South Charleston: (304) 746-1969
      - Email the IT Service Desk (itservicedesk@marshall.edu)
- **Virtual office hours**:
  - By appointment for video meeting; Important: All office hours should be held virtually during the COVID-19 pandemic unless face-to-face hours are approved by the department chair.
  - Students are expected to communicate with instructor to set up **video meetings** via **Microsoft Teams**.
- Course web page: **MU Online (Blackboard)** http://www.marshall.edu/muonline/. It is important to visit **MU Online (Blackboard)** regularly for up-to-date course information.

Additional COVID-19 Related Information:
- All students must wear face coverings during class and in all academic buildings, hallways, stairwells, lobbies. All Marshall students will receive two branded reusable cloth masks upon return to campus. Students who arrive in class without a face covering will be asked to leave the classroom.
- All students must abide by engineered social distancing protocols (one-way entrances/exits, one-way stairwells, etc.).

Course Description: From Catalog
- Comparative study of the concepts found in contemporary programming languages. Emphasis is on design and evaluation of a language in terms of its features and their implementation. (PR: CS 210)

Course Student Learning Outcomes: The table below shows the following relationships: How each student learning outcomes will be practiced and accessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
OC- 1: Students will comprehend and apply the program paradigms to simple problems (**a, h**)	• Lecture • Examples • In-class exercise	• Homework • Quiz • Exam
OC- 2: Students will be able to explain the fundamental principles that underlie all programming languages (**i**)	• Lecture • Examples • In-class exercise	• Homework • Quiz • Exam
OC- 3: Students will be able to demonstrate understanding of the basic structure and syntax of programming languages (**c, i**)	• Lecture • Examples • In-class exercise	• Homework • Quiz • Exam

ABET a-i: http://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-computing-programs-2017-2018/#outcomes

Preferred Communication Method and Expected Response Time:
- You are expected to communicate with instructor to set up video meetings via Microsoft Teams. 6 hours advance notice is required when scheduling an appointment. If you ask instructor to meet you on Microsoft Teams in one or two hours, the answer will probably be "No".
- You can send a message (visible to all Teams members) to instructor in class channel on Microsoft Teams. However, you may expect a delayed response because it depends on when the instructor checks or uses Microsoft Teams.

- To send a message in channel on Microsoft Teams, watch https://www.youtube.com/watch?v=7DSbBr7Xwfs
- You can generally expect an email response within 6 hours. If you do not get a response within 6 hours, please forward your previous email to instructor to remind instructor.
- You can generally expect the feedback on homework, review quiz, and exam in one week after submission. If you do not receive the feedback in two weeks, please send an email to instructor.
- You are also encouraged to actively communicate with fellow students to discuss any class related topics (quiz, homework, or exam) in class channel on Microsoft Teams.
  - Be a good classmate
    - Remember your own role as a student. Follow your instructor's directions at all times. Be authentic and collaborative with fellow students. Be aware of cyberbullying and make every attempt to eliminate it. Appreciate the diversity and different communication styles of your peers.
  - Be professional
    - Proofread your own writing for spelling, grammar, and punctuation to prevent miscommunication. Avoid slang, sarcasm, or emotionally-charged writing, as tone can be difficult to translate online. Profanity and offensive language will not be tolerated. Do not use abbreviations (2moro, 2T, B@U) or emoticons in class channel.

Required Textbooks, Additional Reading, and Other Materials:
- A list of reference books will be used. For more information, please refer to the following resources:
  - Robert W. Sebesta. *Concepts of Programming Languages*, 11th Edition. Pearson. 2015. ISBN-10: 013394302X, ISBN-13: 978-0133943023.
  - Michael L. Scott. *Programming Language Pragmatics*, 4th Edition. Morgan Kaufmann. 2015. ISBN-10: 0124104096, ISBN-13: 978-0124104099.
- Important concepts/materials will be included in the lecture notes from various sources, and posted on MUOnline.

Course Requirements and Grading Policy:
- **1st Exam: 15%, Feb 18 (Thursday), 12:30 p.m. – 1:45 p.m., Blackboard**
- **2nd Exam: 15%, Mar 18 (Thursday), 12:30 p.m. – 1:45 p.m., Blackboard**
- **3rd Exam: 15%, Apr 27 (Tuesday), 12:45 p.m. – 2:45 p.m., Blackboard**
  - All three exams are **computer-based exams**. You can take exam wherever you want during exam time and **SUBMIT on Blackboard.**
  - Open book and open notes; Internet resources are allowed.
  - There will be **NO** make-up for missing exam. Only university (Student Affairs, https://www.marshall.edu/student-affairs/) excused absences with appropriate and official **DOCUMENTATION** will be accepted for make-up exam. The make-up exam must be taken within two days after the scheduled exam.
  - If you want to take a conflict exam, you must talk to instructor and provide a valid document at least two weeks before the scheduled exam. The conflict exam must be taken within two days after the scheduled exam.

- **Review Quiz: 15%**
    - All review quizzes are **computer-based quizzes**. You will take review quiz at the beginning or end of class meeting and **SUBMIT on Blackboard.**
    - Review quiz will **NOT** be announced in advance, so **attendance is highly REQUIRED**.
    - There will be **NO** make-up for missing review quiz due to absence, lateness, etc.. Only university (Student Affairs, https://www.marshall.edu/student-affairs/) excused absences with appropriate and official **DOCUMENTATION** will be accepted for make-up review quiz. The make-up review quiz must be taken within two days after the scheduled quiz.
- **Homework: 40%**
    - Homework includes lab assignments and writing assignments.
    - Homework should be **SUBMITTED on Blackboard before Due Date**. *Other submission methods (i.e., email) will NOT be accepted.*
    - **LATE Submission will NOT Be Accepted on Blackboard** since the submission link will be closed automatically after due date.
- Plagiarism:
    - Plagiarism or cheating will not be tolerated in the class.
        - 1st plagiarism will result in zero point in the suspected work.
        - 2nd plagiarism will result in immediate dismissal (F grade).
- All grades will be posted on Blackboard.
    - *You are highly suggested to check your grade on Blackboard frequently and notify instructor immediately if there is any grading error*.
    - Mid-term grade will be posted before **Mar 22, 2021** (**Monday**)
        - **Mar 22, 2021** (**Monday**), Last day to withdraw from a full semester individual course. Spring semester 2021 calendar: https://www.marshall.edu/academic-calendar/spring-2021-semester/
- Grade Scale:
    - Actual points received in each category should be converted into category percentage.
    - For example, if you got 40/50 for homework, the percentage of homework category will be (40 / 50) * 40 = 32 (%).
    - A (100 - 90), B (89 - 80), C (79 - 70), D (69 - 60), and F (59 - 0)
- Bonus Points & Extra Credits:
    - Throughout the semester, the instructor will create certain **voluntary** work for **all** students to get bonus points. However, the instructor will only reward the students who complete the **voluntary** work.
- Excuses
    - Because there is a degree of flexibility in completing items, it is your responsibility to keep track of dates and give yourself enough time for completion. If you wait until the last minute, there is no one to blame but yourself. With that said, I am also not heartless. If there is something that occurs which prevents your access to the course for a significant length of time (e.g., serious illness, death in the family, or personal tragedy) please contact me as soon as possible and we may be able to work something out. In this case, I will need verification, and it will be left to my discretion on its acceptability.

Attendance and Virtual Classroom Policy:

- Students are expected to attend punctually all virtual class meetings, from the beginning of the semester until the end of the semester.
- Each student has **TWO** "unexcused" class absence during the entire semester. (Make-up for missing review quiz will be provided whenever requested by student.)
- If a student needs self-quarantine for 14 days due to COVID-19, make-up will be provided for exam, review quiz, or homework that is due during self-quarantine period when the self-quarantine is over.
  - Self-quarantine is not counted as "unexcused" class absence.
- If a student misses a virtual class without university excused absence, the student should not expect individualized instruction what was missed. This will be effective from the beginning of semester.
- Students are expected to assist in maintaining a virtual classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave virtual class.
- Students will be **muted** and they will need to raise a hand 🖐 to ask questions during class meeting.
  - To raise your hand in a Microsoft Teams meeting, watch https://www.youtube.com/watch?v=7oVnuJA1ACE
- The instructor will first ask students to elaborate on their questions, and then provide responses.

Marshall University Policy: By enrolling in this course, you agree to the University Policies. Please read the full text of each policy (listed below) by going to Academic Affairs: Marshall University Policies. (URL: http://www.marshall.edu/academic-affairs/policies/)

- Academic Dishonesty Policy
- Academic Dismissal Policy
- Academic Forgiveness Policy
- Academic Probation and Suspension Policy
- Affirmative Action Policy
- Dead Week Policy
- D/F Repeat Rule
- Excused Absence Policy for Undergraduates
- Inclement Weather Policy
- Sexual Harassment Policy
- Students with Disabilities (Policies and Procedures)
- University Computing Services Acceptable Use Policy

Course Schedule and Important Dates: Topics and/or dates may be changed during the semester at the instructor's discretion because of scheduling issues, developments in the discipline, or other contingencies.

- Jan 19: Welcome & Course Introduction
- Jan 21: Preliminaries of Programming Languages
- Jan 26: Evolution of Programming Languages
- Jan 28: Evolution of Programming Languages
- Feb 02: Syntax and Semantics
- Feb 04: Syntax and Semantics
- Feb 09: Lexical and Syntax Analysis
- Feb 11: Lexical and Syntax Analysis
- Feb 16: Lab; No Live Lecture
- **Feb 18: 1st Exam, 12:30 p.m. – 1:45 p.m., Blackboard**
- Feb 23: 1st Exam Discussion
- Feb 25: Names, Bindings, and Scopes
- Mar 02: Names, Bindings, and Scopes
- Mar 04: Data Types
- Mar 09: Data Types
- Mar 11: Expressions and Assignment Statement
- Mar 16: Lab; No Live Lecture
- **Mar 18: 2nd Exam, 12:30 p.m. – 1:45 p.m., Blackboard**
- Mar 23: 2nd Exam Discussion
- Mar 25: Statement-Level Control Structures
- Mar 30: Statement-Level Control Structures
- Apr 01: Subprograms
- Apr 06: Subprograms
- Apr 08: C Programming
- Apr 13: C Programming
- Apr 15: Lab; No Live Lecture
- **Apr 20: "Dead Week"** – Self Review; No Live Lecture
- **Apr 22: "Dead Week"** – Self Review; No Live Lecture
- **Apr 27: 3rd Exam, 12:45 p.m. – 2:45 p.m., Blackboard**