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# 15-213/18-213: Introduction to Computer Systems (ICS)

Summer 2020

15-213/18-213 Lecture 1: TWRF 12:00-1:20, GHC 4215, [Brian Railing](#)

12 units

The ICS course provides a programmer's view of how computer systems execute programs, store information, and communicate. It enables students to become more effective programmers, especially in dealing with issues of performance, portability and robustness. It also serves as a foundation for courses on compilers, networks, operating systems, and computer architecture, where a deeper understanding of systems-level issues is required. Topics covered include: machine-level code and its generation by optimizing compilers, performance evaluation and optimization, computer arithmetic, memory organization and management, networking technology and protocols, and supporting concurrent computation.

[Course Syllabus](#)**Prerequisites:** 15-122

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## Getting Help

**Piazza** [Piazza](#)**Office Hours** GHC 4215Office hour specifics can be found [here](#).

## Course Materials

**[Schedule](#)** Lecture schedule, slides, recitation notes, readings, and code**[Assignments](#)** Details of assignments, due dates, and policies**[Exams](#)** Information about quizzes, exams, and final**[Lab Machines](#)** Instructions for using the lab machines**[Resources](#)** Additional course resources

## Course Information

**For details** See the [course syllabus](#) for details (below is just a few overview bits).**Lectures** TWRF 12:00-1:20pm Zoom**Textbooks** Randal E. Bryant and David R. O'Hallaron, [Computer Systems: A Programmer's Perspective, Third Edition](#), Pearson, 2016Brian W. Kernighan and Dennis M. Ritchie, [The C Programming Language, Second Edition](#), Prentice Hall, 1988

**Credit** 12 units

**Grading** Composed from total lab performance (52%), total exam performance (30%), active work (18%).

**Labs** There are 7 labs, not evenly weighted. See the [assignments page](#) for the breakdown.

**Exams** There is one midterm exam, in class, closed book (12%).  
There is a final exam, in class, closed book (18%).

**Home** <http://www.cs.cmu.edu/~213>

**Questions** Piazza, office hours, email

**Canvas** We are using Canvas for this course.

**Course Directory** /afs/cs/academic/class/15213-m20/

## Instructors

**Name** [Brian Railing](#)

**Contact** bpr@cs.cmu.edu,  
x8-3143

**Office** GHC 6005

**Office Hours** after lectures (not recitation/OH days):  
[TBD](#)  
(or by appointment)

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