

CSCI 351 — Principles of Parallel Computing

Jeremy Iverson

College of Saint Benedict & Saint John's University

- instructor(s)
 - Jeremy Iverson (jiverson002@csbsju.edu)
 - MAIN 258, (320) 363-5542
 - Zoom office hours: TBD
- textbook
 - *An Introduction to Parallel Programming*, 1st Edition, Pacheco
- website
 - <https://csbsju.instructure.com/courses/14840>
- zoom
 - <https://csbsju.zoom.us/j/91795643146?pwd=ZGFRejNkcTlzQ3FISktTb1V5aysxZz09>

zoom etiquette

- all students should be logged into Zoom, including those in the classroom
- keep microphone muted unless you are talking
- use raise hand feature if you need the instructor's attention
- monitor chat window; use chat feature to:
 - comment or add appropriate input during class activities, or
 - ask questions that are not time sensitive.

zoom test

class structure

- class will be organized around 25 minute blocks
- between each block, we will take a 5 minute break

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 - because there are an abundance of breaks scheduled, please wait until a break to take care of things that require you leaving your seat, unless absolutely necessary

a goal of this schedule is to reduce the impact of internal and external interruptions on focus and flow.

today's schedule

- syllabus
- motivation for studying parallel computing
- challenges of parallel computing
- workflows for our high-performance cluster
- brief review of CPU and memory

course objectives

Presents the theoretical foundations of parallel computing and an overview of several parallel computing models. Exposes students to current parallel programming models and systems through projects. Teaches students the ability to determine the most appropriate model for a given task.

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assignments

- four (4) assignments (serial, Pthreads/OpenMP, MPI, ???)
 - all assignments are to be written in C or C++
- do your own work
- use each other as resources only
- due dates are strict (no partial credit for late assignments)

exams

- two (2) in-class exams (closed book / closed note)
- one (1) in-class final exam (closed book / open note)
[cumulative]

grading

- point distribution
 - assignments: 50% total
 - exams: 15% each
 - final: 20%

scholastic conduct

- Work must be completed in a manner consistent with the College of Saint Benedict's & Saint John's University's codes for academic honesty (read that **here** → Academic Catalog → Academic Policies and Regulations → Rights and Responsibilities).
- Copying another's work, allowing (even negligently) others to copy your work, relying heavily on information that you found on the web, is cheating and grounds for penalties in accordance with the institutional policies.
- There will be an absolutely zero tolerance policy. Any copying issues that will arise will be automatically reported to the institution.

expectations

- prepare for class (do the reading!)
- participate in class
- be respectful

office hours

- stop by anytime
- my calendar

questions?



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