B403 Introduction to Algorithm Design and Analysis
Indiana University Bloomington, Spring 2017

1 Basic information

Instructor: Qin Zhang, qzhangcs@indiana.edu.

Assistant: (AI) Erfan Sadeqi Azer, esadeqia@indiana.edu. (AI) TBA. (Helper) Haoyu Zhang, hz30@umail.iu.edu

Time/location: Monday/Wednesday 1:00pm-2:15pm, Ballantine Hall 344.

Website: http://homes.soic.indiana.edu/qzhangcs/B403-17-spring-algorithm


Office hours: Check class website

2 Description

The course gives an introduction to the design and analysis of algorithms. A tentative list of topics includes: sorting and searching, divide-and-conquer, dynamic programming, greedy algorithms, graph algorithms, and NP-completeness.

3 Homework/Exam Instructions

Homework. The homework assignments will be posted on Canvas. The homeworks are due before class on the due date, in hard copy. No extensions or late homeworks will be granted, unless a request is made to the course instructor before due date and written documents are provided to support the reason for late submission.

Write each problem on a separate sheet of paper (we might separate your problems for grading purposes). Try to be as concise as possible in presenting your solution.

Grading and Regrading. You are responsible to complete the entire homework assignment. The solutions to homeworks will become available to you on Canvas. For a re-grade
on a homework contact the AI responsible for the question within 7 days from the date when
the assignment was officially returned. No re-grading after this period. A re-grade means
that the entire assignment undergoes a re-grade.

**Homework Collaboration Policy.** You may discuss the problem sets with other students
in the class, however you must write up the solutions yourself. If you collaborate, specify
who you worked with. No other solution sources are allowed. Late homework will receive a
score of zero, except in extraordinary circumstances in accordance with IU policy.

**Exams.** All exams are closed book. There will be an mid-term and a final. No make-up
exams.

### 4 Cheating/Plagiarism

Cheating/plagiarism will be subject to IU’s academic integrity policies (check links on class
website). In accordance with the Purdue University Department of Computer Science Aca-
demic Integrity Policy, any instance of academic dishonesty on an exam, or assignment will
be reported to the Dean of Students Office.

**Penalties:**

1. A first instance of academic dishonesty will result in a zero for that assignment plus a
   letter grade deduction at the end of the semester.

2. A second instance of academic dishonesty will result in a grade of F.

### 5 Grading

20% homeworks (6 in total), 15% projects (2 problems), 30% midterm, 35% final.