## MATH3305 PROBLEM SOLVING IN MATHEMATICS KENTUCKY WESLEYAN COLLEGE SPRING 2016

Professor: Kyle Besing Office: Hahn 110 Email: kbesing@kwc.edu Website: http://www.kylebesing.com Twitter: @DrBesing Facebook: http://www.facebook.com/kebesing Phone: 270-852-3161 Monday, Wednesday, and Friday 9:00 - 10:50 am Office Hours: Tuesday and Thursday 8:00 - 10:00 am or by appointment

Course Description: Problems from logic, number theory and recreational mathematics with an emphasis on developing student awareness of the problem solving process. The course is designed to increase the students own problem solving ability and his or her ability to teach the process to others.
Material Covered: Selected Chapters from the text.
Meeting times: Monday, Wednesday, and Friday 11:00 – 11:50 am
Meeting location: Administration Building Room 210

Credits: 3 semester hours

Textbook: Crossing the River with Dogs 2nd Edition, Johnson, Herr, and Kysh

- Attendance: Attendance is an integral component of learning, successful completion of courses and the professional work ethic. Excessive absences in classes can result in lowered grades and reduction or loss of financial aid. Attendance is reported each class period to the Wesleyan CARES TEAM. Students are responsible for any material or announcements given in class. Six unexcused absences will result in a failing grade.
- **Participation:** A majority of this course will be in-class participation. I will assign one or two chapters from the text that you should read before the start of each week. I will go over material some meetings, but primarily the course will consist of students working problems at the board. You will be graded both on completeness of the solution as well as your ability to present the solution to others.
- Written Solutions: Periodically, you will be assigned a problem to solve and neatly write up a solution. These solutions will be due one week after they are assigned.

Tests: There will be three one hour tests as well as a comprehensive final exam.

Date: January 11, 2016.

Exam Schedule (Tentative): Note these dates are subject to change.

- Test 1 Friday, February 12
- Test 2 Friday, March 11
- Test 3 Friday, April 8

## Final Exam: Monday, April 25 from 2:00–4:00 pm

- **Grading:** Regular tests are worth 100 points and the final exam will be worth 200 points. Inclass work will count for 200 points and written solutions will be worth 100 points. A total of 800 total points will be possible and the course grade will be determined by the percentage of total points earned throughout the semester.
- **Grading Scale:** The following percentages will guarantee at least the associated letter grade. A 90%, B 80%, C 70%, and D 60%. Earning less than 60% of the possible points can result in a grade of F.

## Course Policies:

- Cell phones are prohibited in the classroom, unless they are turned off and inside a container, like a backpack.
- Headphones connected to listening devices are forbidden in the classroom.
- Excessive talking with other students is disruptive to instruction and will not be tolerated.
- A respectful conduct towards fellow students and your instructor is expected at all times.
- Excused absences will need to be arranged at least 24 hours in advance. Medical emergencies are an exception, but written documentation will need to be produced in this case. Assignments will not be made up for unexcused absences.
- Anyone in violation of course policies will be warned once, then asked to leave the class-room.
- Academic Misconduct Policy: Kentucky Wesleyan College expects its students to adhere to the highest standards of academic honesty. Any student who, beyond a reasonable doubt, violates these standards is subject to disciplinary action by the faculty member in whose class the academic dishonesty has occurred and by proper college authorities. Examples of acts constituting academic dishonesty include (but are not limited to) the following:
  - (1) Knowingly participating in fraudulent activities relating to examinations, assignments or projects: e.g.
    - (a) Plagiarism claiming or implying that the ideas or works of others are one's own original thoughts (includes making use of reports, term papers, films or other writing advertised for sale).
    - (b) Writing reports, etc., or completing projects for others to submit for evaluation.
    - (c) Submitting work that has been submitted in another class (unless there is written permission and it is acceptable to the instructor).
    - (d) Taking examinations for another student.
    - (e) Any form of cheating during the administration of an examination.
    - (f) Intentionally missing examinations to obtain information from class members for illegitimate make-up of examinations.
    - (g) Providing material or information to another person with knowledge that these materials or information would be used improperly.
  - (2) Theft of examinations, projects, grade books, etc. Alteration of grades or scores on examinations, reports or in grade books. Procedures and penalties: A faculty member who finds

beyond a reasonable doubt that a student has committed an act of academic dishonesty shall have the option after consultation with the academic dean of imposing one of the following penalties:

- (a) Substitute examination or assignment.
- (b) A grade of "F" for examination or assignment.
- (c) Expulsion from the class with a grade of "F" for the course.
- (d) Recommendations to the academic dean that the student be expelled from the college.

In addition to being honest, Kentucky Wesleyan students are expected to be civil and respectful to their instructors and fellow students. The faculty member may handle first-time, relatively minor offenses by himself or herself. The faculty member should include the Vice President of Academic Affairs in more serious cases. The Vice President of Academic Affairs may withdraw the student from the class and/or file disciplinary charges to the Vice President of Student Services. See "Student Code of Conduct," standard #4, in the KWC Student Handbook.

Procedures for review or appeal of penalties may be found in the Kentucky Wesleyan College Student Handbook.

- Disability Support Statement: "Kentucky Wesleyan College is committed to providing access to programs and services for qualified students with disabilities. If you are a student with a disability and require accommodations to participate and complete requirements for this class, notify me immediately and contact Dr. Leah Hoover at the Office of Disability Services (FOB #15 or 270-852-3212) for verification of eligibility and determination of specific accommodations."
- **Disclaimer Statement:** The professor reserves the right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.