Professor: Dr. Maria G. Fung Office: AA 305

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CLASS MEETS
1-1:50 p.m. MF AA 104
12-1:50 p.m. W AA 104

## Dr. Fung's OFFICE HOURS \& SCHEDULE

| Time | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9-10 | Math 430 |  | Math 430 | Usually not on campus | Math 430 |
| 10-11 | Office Hour | Math 211 | Office Hour |  | Office Hour |
| 11-12 | Math 211 |  | Math 211 |  | Math 211 |
| 12-1 | Lunch | Office Hour | Math 396 |  | Lunch |
| 1-2 | Math 396 |  |  |  | Math 396 |
| 2-3 | Office Hour |  | Grading |  | Office Hour |

Office hours are for you, so please do come to introduce yourself in more detail to me and feel free to drop by for help. At times other than my listed office hours you are welcome and encouraged to call or email me with questions about the course. If you have direct scheduling conflicts with my office hours and would like further help, please let me know.

## PREREQUISITES

Mathematics 211, 212, and 213 with a grade of C- or better.

## REQUIRED COURSE MATERIALS

Text: "Problem Solving Strategies Crossing the River with Dogs", Second Edition, Ken J ohnson and Ted Herr

Course pack at the University Bookstore on the Oregon Scoring Guide and inclass activities materials.

COURSE STRUCTURE: Class will be a mix of exploration and reflection, activities and problem solving sessions. Please bring your text and course packs to class every day.

COURSE CONTENT: This course is designed for students planning to be elementary or middle school teachers. Our goals for this term are to:

- improve problem solving skills by building upon and extending knowledge acquired in the foundational sequence
- learn to write non-routine problems that introduce, enhance or illustrate important mathematical themes or ideas
- become proficient in using the state problem solving scoring guide
- use the problems of the week (POW) environment at the Math Forum Resource (http://www.mathforum.org/pow) to experience reading, replying, and evaluating young problem solvers' solutions


## These goals are based on the Problem Solving Standard by the NCTM:

## Instructional programs from prekindergarten through grade 12

 should enable all students to--- build new mathematical knowledge through problem solving;
- solve problems that arise in mathematics and in other contexts;
- apply and adapt a variety of appropriate strategies to solve problems;
- monitor and reflect on the process of mathematical problem solving.

ATTENDANCE: Daily attendance is required for your success in this course. If you miss class, it is your responsibility to ask a classmate for notes on the material that you have missed. I will not have discussion notes available if you have missed class, nor will I repeat my discussion during office hours.

READING THE TEXT: You will be expected to carefully and completely read each chapter in your textbook. It is a good idea to briefly read the assigned section before class and then to carefully read the section before you start your homework. I encourage you to ask questions about the examples presented in the book. You may ask questions about the text both in class and during office hours.

HOMEWORK: There will be a variety of homework assignments given in this course. There will be five main categories of homework assignments:

Text Problems, Journals, Problems of the Week (POWs), In-class Activities, Portfolio Problems

## TEXT PROBLEMS HOMEWORK

- Homework from our textbook will be assigned daily. These homework assignments will not be assessed directly but by a peer review process on Wednesdays. Everybody will be given the task of checking whether all the problems assigned the previous week have been completed by a classmate and everybody will grade one problem in more detail (please see the peer grading cover sheet in your activities course pack for more detail).
- Exams will be based on homework problems and in-class activities.
- You will find that if you do not do all of your homework, you will not succeed in learning the material covered in this course.
- Every once and again, I will check random homework problems to find out how everybody is progressing.

J OURNAL HOMEWORK: J ournal assignments will be roughly bi-weekly. Please see the Journal Assignment Sheet for more detail.

PROBLEMS OF THE WEEK (POWs): As you begin your path as teachers, we will focus on problem solving skills. Approximately every other week you will be assigned special problems to help you focus on clear and precise explanations. More detailed information is provided on the POW Assignments sheet.

COURSE NOTEBOOK: All of your course materials, as described below, are required to be carefully filed in your course notebook. For your notebook please use a large 3 ring binder divided into the following, clearly marked, sections:

- Class Notes and Activities
- Text Homework
- J ournal Assignments
- Problems of the Week
- Exams

At the end of the term your notebook will be collected and I will review the materials in your course notebook.

## COURSE GRADING

- Attendance and in-class participation are required. Each day your participation in class will be noted.
- Documented (written) excuses for illness, etc. will be accepted for missed classes and/ or late work. Notification must be prompt and in advance.
- All of your class, homework activities and exams will count as part of your grade with the following breakdown, out of a total of 1500 points:

| Exams (Midterm and Final 100\&125 pts.) | 225 pts. |
| :--- | :--- |
| POWs | $5 \times 25 \mathrm{pts}=125 \mathrm{pts}$. |
| J ournal Assignments | $4 \times 15 \mathrm{pts}=60 \mathrm{pts}$. |
| Text Problems Homework | $6 \times 25 \mathrm{pts}=150 \mathrm{pts}$. |
| Attendance and Participation | $90 \mathrm{pts} .(\sim 3 \mathrm{pts} . /$ class $)$ |
| Portfolio Problems | $5 \times 25 \mathrm{pts}=125 \mathrm{pts}$. |
| Math Forum Mentoring | 200 pts. |
| Other | 25 pts. |

EXAMS: There will be one mid-term exam in this course and one final. All exams are timed, and the Final Exam is an in-class group final. Make-up or early exams will only be given in the case of a documented emergency or a documented university sanctioned absence from class. Prior notification and my agreement are required.

APPROPRIATE CLASSROOM BEHAVIOR: You are ultimately responsible for your own attendance and performance. Disruptive classroom behavior of any kind, such as talking during lecture or consistently coming to class late etc., is not appropriate. Proscribed Conduct for all students is described in the University Catalog. Any student found cheating on an exam or copying from another student's exam paper will receive a zero score on that exam.

## LATE WORK POLICY

Your work is due by 3 p.m. on the due date. All due items may be turned in, unexcused, 1 class day late (by 12p.m.) for $80 \%$ credit or 2 class days (by 12p.m.) late for $60 \%$ credit. There will be NO credit for assignments more than 2 class days late. Any item turned in after 3p.m. on a due date will be considered late. There are no exceptions!

## LEARNING DISABILITIES

If you have a documented learning disability, please talk to me during the first few days of class, I will be more than happy to accommodate you in any way that I can. If you have a documented disability which requires any academic accommodations, you must go to the Office of Disability Services (ODS) for appropriate coordination of your accommodations. You can drop by APSC 405 or contact ODS at (503) 838-8250 (V,TTY) to schedule an appointment.

## INCOMPLETE POLICY

If you are passing this course and have a documented reason for not being able to complete the course, I may be able to grant you an incomplete. You must obtain my agreement if you wish to have a grade of incomplete recorded.

## STANDARD GRADING SCALE FOR THIS COURSE

(Total \% for the course, usual rounding rules apply)

| \% | Grade | \% | Grade | \% | Grade | \% | Grade | \% | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 93- \\ & 100 \end{aligned}$ | A | $\begin{aligned} & 90- \\ & 92 \end{aligned}$ | A- | $\begin{aligned} & 87- \\ & 89 \end{aligned}$ | B+ | $\begin{aligned} & 83- \\ & 86 \\ & \hline \end{aligned}$ | B | $\begin{aligned} & 80- \\ & 82 \end{aligned}$ | B- |
| \% | Grade | \% | Grade | \% | Grade | \% | Grade | \% | Grade |
| $\begin{aligned} & 77- \\ & 79 \end{aligned}$ | C+ | $73-$ | C | $70$ | C- | $\begin{aligned} & 60- \\ & 69 \end{aligned}$ | D | $\begin{aligned} & \text { Below } \\ & 60 \end{aligned}$ | F |

