Math 130: Contemporary Mathematics  
Spring 2010  
Course Procedures

Professor: Josh Laison  
Ford 215, x6689, jlaison@willamette.edu

Office Hours:  
Monday 3:00-4:30  
Wednesday 3:00-4:30  
Thursday 11:00-12:00 AM, at the Bistro  
or anytime by appointment or by catching me in my office. You can see my schedule and available times at http://www.willamette.edu/~jlaison

Class Meetings: Ford 102, 1:50-2:50 Monday, Wednesday, Friday
Drop-In Math Lab Help: The math hearth  
6:00-9:00 PM, Sunday through Thursday

Text: The Heart of Mathematics, Edward Burger and Michael Starbird  
Course Web Page: http://www.willamette.edu/~jlaison/contemporary.html

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Daily problems (around 25)</td>
<td>25%</td>
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<tr>
<td>Team projects (around 6)</td>
<td>25%</td>
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<tr>
<td>Individual problems (around 6)</td>
<td>25%</td>
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<tr>
<td>Class attendance and participation (41 days)</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Course Goals:

- Have fun doing mathematics.
- Think hard about mathematics.
- Create our own mathematical ideas.

The Textbook:  
The text is probably different from any other math text you have seen (I know that is true for me) and you might be surprised that it is actually fun to read. Certainly, reading it will provide you with greater understanding of the material of the class, and improve your grade.

Ways to Get Unconfused:

- I encourage you to find classmates to work together with on problems, even if you’re not confused! For the team projects, this is even built into the assignment. Only the individual problems must be done by yourself.
• Find me in my office during my office hours or at other times, and I will be more than
happy to answer questions. Feel free to hang out in the math hearth or in my office
and work on homework there. These are great places to meet other students from the
class and work together, and I will be easily available for questions.

• Come to the evening group study sessions held by the math department in the math
hearth. Math majors are paid by the department to hang out and answer math ques-
tions 5 nights a week. These are also great places to form study groups. Since you
need to do your homework sometime, why not do it then?

Assigned Problems:
In this course, you will learn quite a lot of mathematics, but with a slightly different
emphasis than other mathematics courses you may have taken in the past. The course is not
a prerequisite for any other, and it is unlikely that you will require the material you learn in
this course for your career after you graduate. The material is simply presented to satisfy
your own intellectual curiosity.

I will try as hard as I can to avoid making any problem you attempt in this course
tedious or overly frustrating. Mathematics is all about solving puzzles, exploring patterns,
and getting insights into new ideas. For your part, try not to race through the problem
assignments with the goal of arriving at the solution as quickly as possible. Play with the
ideas! Invent new problems and solve those! Discuss the problems with your friends and
classmates! The problems are intended not as hurdles to be leapt over, but as intellectual
challenges to be enjoyed. I hope that you will enjoy them as much as I do. To encourage you
to think creatively, particularly interesting, creative, or unique solutions to any problem in
this course will be given extra credit. This includes solving a related question that you pose
yourself.

There will be three types of assigned problems in this course. All of them will be available
on the course webpage at least a few days before they are due.

• Daily Problems: These will be due every Monday, Wednesday, and Friday by 4:30
PM, starting Wednesday, January 20, and should be turned in either to me in class, or
to the folder outside my office, Ford 215. These are the only component of the course
graded by a student grader.

• Team Projects: Team projects will be due approximately once every two weeks. You
will work with a team of one or two other students on these, and will turn in a single
project for your team. This does not mean that you should divide up these problems
and each work on a third of them. They are meant to be discussed in collaboration. I
hold you accountable to be an active member of your team.

• Individual Problems: The individual problems will also be due around every two
weeks. You may not talk to anyone other than me about the individual problems.
These problems will be your chance to show your individual problem-solving ability.
They will be related to topics covered in class, but different enough that you can work
on them independently and still work on the other two types of problems collabora-
atively.
Since the individual problems are the only completely independent work I will receive
from you this semester, please make every effort to keep your work on these prob-
lems independent. Collaboration on the individual problems counts as cheating in the
course, and will have serious consequences.

Missed Classes:
Attendance and participation in class counts for 25% of your final grade. You may miss
3 days of class without it affecting your grade; more than that will lower this component
of your grade. This includes any official absences for team or class events. In addition,
attendance by itself will not get you an A for class participation – you should make an effort
to be an active participant in class activities and discussions.

Late Assignments:
I expect everyone to attend all classes and turn in all homework assignments on time. Un-
fortunately, it is inevitable that some people will have crises during the semester that will
prevent them from turning in homework on time. If this happens to you, talk to me about
it, and I will generally be sympathetic.

Disabilities:
If you have a documented disability for which accommodations may be required in this
class, please contact me to discuss your needs. Additionally, you will need to register with
Disability and Learning Services in the Bishop Wellness Center within the first two weeks of
class. All such discussions will be confidential.

Academic Honesty:
Cheating and plagiarism are serious offenses and will be treated severely, in accordance with
college policy. In addition, I am personally insulted by such behavior. So please don’t do it.
These are the practices I expect you to follow in each of the components of the course:

on daily problems: You may, and are encouraged to, discuss the homework with anyone,
geret help from calculators, your textbook, etc. However, your submitted written work
should be your own.

on team projects: The members of the team should contribute equally to producing the
final product. Do not put your name on work written by others.

on the individual problems: You may consult your text and notes. You may not discuss
the individual problems with anyone other than me, and you may not consult other
sources such as the library or the internet.