

# [ INTRO TO CONTEMPORARY MATHEMATICS ]

( syllabus )

M a t h 1 0 5 - C R N 1 0 7 4 2 - S P R I N G 2 0 1 4

**(CLASS INFO)**

Day/Time: **MTWF/9:00pm-9:50pm**

Room: **NS 016**

Instructor: **Chris Mock**

**(CONTACT INFO)**

Office: Maaske 305

Phone: 503-838-9710

E-mail: [mockc@wou.edu](mailto:mockc@wou.edu)

Website: <http://www.wou.edu/~mockc>

**(MOCK'S SCHEDULE)**

	<b>monday</b>	<b>tuesday</b>	<b>wednesday</b>	<b>wednesday</b>	<b>friday</b>
8:00 am	<i>office</i>	<i>office</i>	not on campus	<i>office</i>	<i>office</i>
9:00 am	math 105	math 105		math 105	math 105
10:00 am	math 95	math 95		math 95	math 95
11:00 am					
12:00 pm					
1:00 pm	math 111	math 111		math 111	math 111
2:00 pm	math 95	math 95		math 95	math 95
3:00 pm	<i>office</i>				

(I may, or may not, be present in my office during times that are not marked on the above chart – but you are encouraged to try me during these times. If I am available I will be glad to work on some stuff!)

**(COURSE DESCRIPTION)**

Introduction to Contemporary Mathematics is a course designed for liberal arts students that focuses on mathematical problem solving activities from real world situations to convey the application of mathematics. This course will include instruction in descriptive and inferential statistics, probability, consumer buying, savings and loans, problem solving, and other various topics. Emphasis will be placed on mathematical reasoning.

**(COURSE OBJECTIVES)**

- Understand and appreciate the many ways in which mathematics is used in problem-solving and the various applications to real-world situations
- Develop confidence in your ability to understand, question, and analyze the mathematics that arise in your daily life

(COURSE OBJECTIVES cont...)

- Develop techniques to solve problems that require mathematical concepts and quantitative reasoning
- Carry out appropriate calculations, apply formulas or algorithms with knowledge of the underlying mathematical principles, and draw conclusions from the results
- Be able to read and construct graphs
- Understand the basic measures of 'center' and 'variation'
- Understand and use formulas related to money matters

(COURSE MATERIALS)

- *The Heart of Mathematics* with Wiley Plus, by Burder & Starbird. ISBN: 9781118556825
- to register for the online homework portion of this class please visit:  
<http://edugen.wileyplus.com/edugen/class/cls419599/>
- calculator

(GRADE WEIGHTS)

Homework	37.0 %
Quizzes	15.0 %
Exam I	15.0 %
Exam II	15.0 %
<u>Final Exam</u>	<u>18.0 %</u>
Total	100.0 %

F	0.00% - 59.9% or not passed skills test	C+	77.0% - 79.9%
D-	60.0% - 62.9%	B-	80.0% - 82.9%
D	63.0% - 66.9%	B	83.0% - 86.9%
D+	67.0% - 69.9%	B+	87.0% - 89.9%
C-	70.0% - 72.9%	A-	90.0% - 92.9%
C	73.0% - 76.9%	A	93.0% +

Special Grades

Incomplete grades may be assigned at the discretion of the instructor. To be eligible for an incomplete, you must have notified both the instructor and the Office of Student Affairs in writing of an extremely extraordinary and verifiable situation. Furthermore, at least 80% of the work must be completed up to that point. A contract between the student and instructor for completion of the remaining course work is required.

If the course is taken on a pass/no-pass basis, a passing score is designated at a C- or better.

(HOMEWORK)

Online homework will be assigned regularly through the WileyPlus online system. An access code is required for the course and to do your homework. Other written homework may also be assigned which you will turn in directly to me on the specified date. **Late homework will be accepted at a 30% reduction of points.**

## (QUIZZES)

Quizzes will occur on a weekly basis, given every Friday of non-exam weeks. Missed quizzes may not be made up, however your lowest quiz score will be dropped at the end of the term.

## (EXAMS)

Two exams will be given during the term. The dates are subject to change but will likely be during weeks four and seven. Makeup exams will only be available in the case of a documented emergency or university sanctioned absence from class. Prior notification and my agreement are required. Please email me if you know you will miss an exam – there is no excuse for missing an exam and me not knowing why. If your score on the final exam is higher than your lowest midterm score, then your final exam score will replace the lowest midterm score.

**New to this term: the final exam *can not* be taken at a different time. If it is physically impossible for you to make the time, then you must seek permission from the mathematics department. Please see me for details.**

## Projected Grade (PG:)

When I pass back an exam you will see two letter grades, one is the score you got on your exam, the second one will always come after PG: and it represents the grade you will receive if you continue to perform at your current exam & homework level.

For example, let's say you take the first exam and score a B, but you haven't turned in a lot of your homework - you might see "PG: C-" at the top of your paper. What that means is this: if you continue to both perform at the B level on your exams and not turn in a lot of homework, you are on course to receiving a C- in the class.

In that sense, the projected grade is somewhat of a warning flag – it is telling you what grade you are currently projected to earn. With each exam you take, the closer your projected grade gets to becoming your actual grade in the course - your projected grade *approaches* your actual grade. So if you get your first exam back and it says "PG: D-" – don't freak out – it's projecting that you will perform at the level of the average of your current exams on every exam (including the final) for the rest of the term (which you can avoid by taking appropriate action).

## (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. This prescribed conduct for all students is described in the University Catalog. In particular, academic dishonesty of any kind will not be tolerated, and will be reported to the university. Also, leave your cell phone off or on silent when you come to class. They are not to be used at all during class. If for some reason you absolutely need to be contacted (in some emergency situation), inform me before class and an arrangement can be made.

## (DISABILITY AND VETERAN SERVICES)

If you have a documented disability which requires accommodations, please contact 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 to schedule an appointment. In addition, 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.

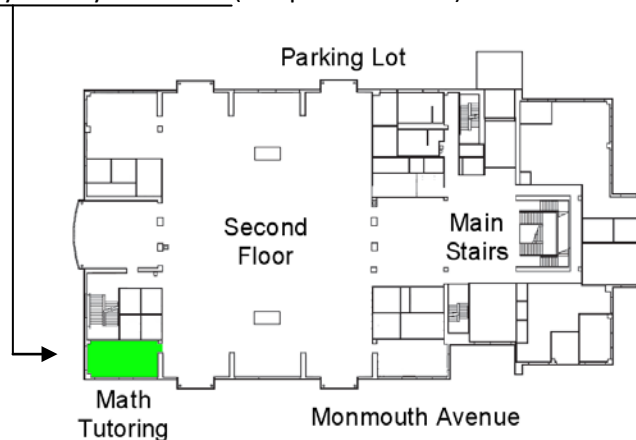
Veterans and Active Military Personnel with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.

#### (WOLF CONNECTION SYSTEM)

If the instructor determines your performance in this class is placing you at academic risk, you may be referred to Jesse Poole, Western's Student Success Specialist. Jesse will offer to work with you to address issues and develop a student success strategy. Regardless of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course. If you would like to meet with Jesse regarding any academic struggles you are experiencing, please contact the Academic Advising and Learning Center at [503-838-8428](tel:503-838-8428).

#### (MATH CENTER)

The Math Center is a great place to go for additional help on concepts talked about in this course.. It is located in Hammersly Library room 228 (see picture below)



and is open Monday through Friday from 11:00 am to 5:00 pm (3:00pm on Fridays) beginning week 2 and ending week 10. For additional information on the tutoring center and its hours, please visit

[http://www.wou.edu/las/natsci\\_math/math/tutor/](http://www.wou.edu/las/natsci_math/math/tutor/)

#### (MY WEBSITE)

This section of the syllabus serves as advertisement for my personal website! There are lots of cool things to check on my website, including (but not limited to):

- My office hours
- The schedule of your math course (lets you know exactly what we will be learning on any given day)
- The current homework that is due the very next class day
- Tutoring center webpage
- Copy of this syllabus
- Helpful links and videos to help with the learning of difficult topics
- Any handouts which were given in class (so you can print them if you missed a day)

Please make use of this website! I work hard on maintaining it, and I would hate for it to be a waste. I would say that the most notable thing about it is that it will show you day-by-day what we covered in class on any particular day. I will be updating it every morning with the current day's worth of information.

## (TIPS FOR SUCCESS)

So you might ask me “Mr. Mock, how can I be successful in this class?” Here are just a few tips:

- Show up to class – there are those who believe that showing up to class is optional...and I suppose that’s true from the philosophical perspective of free will, but if you don’t show up to class, you may miss something important!
- Do the homework – contrary to popular belief, doing the homework actually *does* help students practice and learn the material.
- Ask questions – If there is something you don’t understand or need more clarification on, ask me! You can ask during the lecture, come to my office hours, or even send me an email. As a general rule, you can assume that someone else in the class has that same question, so do not feel like you are wasting class time by asking!
- Go to the tutoring center – the students who work at the tutoring center are undergrad mathematics students, and are eager to help students in math 70, 95, 105, 111, and 112.
- Find a study buddy – hold each other accountable for finishing homework, find a time to meet up outside of class to work on the more difficult problems. It’s a lot easier to find motivation when you have a partner.
- Remember why you are here – No doubt all of us are here for a reason. I understand that math 111 is a required course, and maybe not all of us enjoy being here, and at times it may be hard to find the resolve to do 25 math problems some nights for homework, but just remember your ultimate goal – be it nursing school, a business degree, or maybe even a mathematician – this class is en route to your bachelors.
- CHECK MY WEBSITE!!!!!!!!!!!! – look at the course schedule, know what upcoming chapters are and read them beforehand. Know what I will teach before I actually teach it!
- Check your WOU email regularly. If I have something to announce outside of class, it will be through email. I would say I do this often – usually it’s to announce if something unexpected happens and I need to cancel class, or maybe to send an attachment (such as answer keys to a in class review), etc...
- Take practice exams – test anxiety is very real, and very apparent for a lot of students in a math course. One thing you can do to prepare for your exam is to pick 15 or 20 problems from your homework or notes and try to do them all in 50 minutes. If you get stuck at some point or run out of time, that may give you a good indication of how ready you are for your actual exam; and it may also give you insight on what kinds of things you should include on your note card. There is a way to lessen the pressure of timed exams: practice with a time limit.
- Don’t “week 9” me.... A lot of students approach me at the end of the term with excuses on why their attendance has been poor or why their exam scores have been low and they always ask: “Is there anything I can do to pass this course.” So instead I will take the liberty to answer that question right now: There’s nothing you can do at week 9 that can make up for a whole term of absences and poor exam scores. If you find yourself falling behind at like week 4, come see me! Don’t wait!
- Don’t give up – a lot of students struggle with mathematics; and sometimes you will want to throw your book across the room in anger and frustration – and that’s okay. But after you’ve whispered curse words under your breath at the creation of mathematics, take a deep breath. Go over to your book and pick it up and try doing the problems again! Challenging yourself is a good thing!

# [math 105 schedule]

(FALL TERM 2014)

	monday	tuesday	wednesday	thursday	friday
<b>week I</b> (sep 29 – oct. 3)	syllabus	story problems (day I)		story problems (day II)	story problems (day III) + small quiz
<b>week II</b> (oct 6 – 10)	section 8.1 (%)	section 8.2 (day I)		section 8.2 (day II)	section 8.2 (day III) + small quiz
<b>week III</b> (oct 13 – 17)	section 8.4 (day I)	section 8.4 (day II)		section 8.4 (day III)	quiz
<b>week IV</b> (oct 20 – 24)	review	<b>EXAM I</b>		ch. 9 preview	section 9.2 (day I)
<b>week V</b> (oct 27 – may 31)	section 9.2 (day II)	section 9.2 (day III)		section 9.1 (day IV)	quiz
<b>week VI</b> (nov 3 – 7)	section 9.3 (day I)	section 9.3 (day II)		section 9.3 (pigs)	finish pigs + small quiz
<b>week VII</b> (nov 10 – 14)	review	<b>EXAM II</b>		weighted averages	weighted averages (day II)
<b>week VIII</b> (nov 17 – 21)	expected value	bayesian inference (day I)		bayesian inference (day II)	section 10.2 + small quiz
<b>week IX</b> (nov 24 – 28)	compound interest (day I)	compound interest (day II)		<b>[ thanksgiving ]</b>	
<b>week X</b> (dec 1 – 5)	equal monthly payments (day I)	equal monthly payments (day II)		review + small quiz	review for final