



# Linear Algebra

Math (3362/3520)-001 || CRN: 10711 || Fall 2017

- Instructor:** Dr. Tom Cuchta (call me Tom)  
**Time:** MWF 10:00-10:50  
**Location:** ET 313  
**E-mail:** tcuchta@fairmontstate.edu  
**Office hours:** My current office hours are posted on my website <http://tomcuchta.com>. They may change throughout the semester without notice. Alternative office hours may always be scheduled via e-mail.  
**Office:** ET 423  
**Class Webpage:** All information will be posted to our class webpage: <http://tomcuchta.com/teach/classes/2017/MATH-3362-Fall-2017-FairmontState/>  
 All information will also be replicated to the class Moodle page.  
**Textbook:** "Linear Algebra" by David Poole, 4th edition (ISBN: 9781285463247)  
**Course Description:** This course covers vector spaces abstractly defined, linear dependence and independence, bases and subspaces, dimension of linear space, linear mappings, kernel and image of maps, rank of maps, linear maps as vector spaces, composition of mappings and multiplication of matrices, the relation between linear mappings and systems of linear equations, row reduced echelon matrix, invertible matrices, calculation of inverse, linear inequalities and half spaces.  
**(Pre/Co)requisites:** MATH 3315 or MATH 2502  
**Calculator policy:** No calculators will be permitted on exams.  
**Attendance policy:** Every class meeting should be attended by the student in its entirety, but attendance will not be recorded for a grade. If a class is missed, it is the *student's responsibility* to find out what was missed and to pick up any returned work.  
**Homework:** There will be numerous assignments that are regularly assigned. Random problems from each assignment will be graded on a scale of 10 points. Completion may constitute part of a homework grade. Only the top 10 homework scores earned will count towards the final grade.  
**Exams:** There will be three one hour exams in this course each worth 100 points. See the calendar below for exam dates.  
**Final exam:** The final exam will be comprehensive and will be worth 200 points.  
**Make-up exam policy:** If an exam is to be missed due to an excused absence (as defined in the student handbook), then it is the *student's responsibility* to arrange an alternative time to take the exam at least one week before the exam is given. In such a case, the student will complete an equivalent exam at an alternate time *before* the normal exam time. If the student misses an exam due to an unexcused absence, the exam may be replaced with the percentage earned on the final exam. The unexcused absence policy only applies *only once*, so further exams missed due to unexcused absences yield a score of zero.  
**Extra credit policy:** Extra credit opportunities may be available throughout the course and will be announced through the usual channels. Points earned through extra credit will be simply added to the final score earned by homework and exams.

		Grade	Point Range	
<b>Grading policy:</b>	Homework	100 points	A	$600 \leq \text{Points Earned} \leq 540$
	Hour exams	300 points	B	$540 \leq \text{Points Earned} < 480$
	Final exam	200 points	C	$480 \leq \text{Points Earned} < 420$
	<b>Total points:</b>	600 points	D	$420 \leq \text{Points Earned} < 360$
			F	$0 \leq \text{Points Earned} < 360$

- Tutoring assistance:** See Fairmont State's tutoring services at <http://www.fairmontstate.edu/academics/tutoring-services>  
See Pierpont's tutoring services at <https://pierpont.edu/ac/campuslife/support/tutoring>
- Student handbook:** <http://www.fairmontstate.edu/publications/campushandbooks/studenthandbook/default.asp>
- Disability support services:** Disability services are available to any student, full or part-time, who has a need because of a documented disability. It is the *student's responsibility* to register for disability services and to provide any necessary documentation to verify a disability or the need for accommodations. Students must provide their professors with a copy of their academic accommodation letter each semester in order to receive accommodations. Faculty, students, and the Office of Disability Services must cooperate to ensure the most effective provision of accommodations for each class.

The Office of Disability Services is located in suite 316 of the Turley Student Services Center. For additional information, please call (304) 333-3661.

## Math (3362/3520)-001 Calendar Fall 2017

Week	Sections
14 Aug – 18 Aug	Preliminaries on sets and fields, §1.1
21 Aug – 25 Aug	§2.1, §2.2, §2.3
28 Aug – 1 Sep	§2.3, §3.1, §3.2
4 Sep – 8 Sep	<b>NO CLASS</b> – 4 September (Labor Day) §3.2, §3.3, §3.5
11 Sep – 15 Sep	§3.5 <i>Review day</i> (13 September) <b>EXAM 1</b> (15 September)
18 Sep – 22 Sep	§3.6, §4.1, §4.2
25 Sep – 29 Sep	§4.3, §6.1, §6.2
2 Oct – 6 Oct	§6.3, §6.4
9 Oct – 13 Oct	<i>Review day</i> (11 October) <b>EXAM 2</b> (13 October)
16 Oct – 20 Oct	§6.5, §6.6
23 Oct – 27 Oct	Miscellaneous material
30 Oct – 3 Nov	Miscellaneous material
6 Nov – 10 Nov	Miscellaneous material
13 Nov – 17 Nov	<i>Review day</i> (15 November) <b>EXAM 3</b> (17 November)
20 Nov – 24 Nov	<b>THANKSGIVING BREAK</b>
27 Nov – 1 Dec	Miscellaneous material
4 Dec – 8 Dec	<b>FINAL EXAM</b> (8 December at 8:00)