

# MATHEMATICS

## SUMMER1 2013 COURSE SYLLABUS - MATHEMATICS 0824.016

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**Course:** Mathematics 0824.016.

**Course Title:** Math 0824-Mathematical Patterns (sec 11).

**Time:** MWTRF : 10:45 am-12:20 pm.

**Place:** Main Campus: BARTNB 00405.

**Instructor:** Awala, Hussein A.

**Instructor Office:** Wachman Hall office: 517.

**Instructor Email:** hussein.awala@temple.edu

**Instructor Phone:** 231-408-8585.

**Office Hours:** MWF 1:00-2:00.

**Prerequisites:** Math 0701 (45) or equivalent algebra course.

**Textbook:** The text we will be using is a custom edition created from two texts: Using and Understanding Math, Bennett and Briggs and Mathematical Ideas, Miller, Heeren, and Hornsby. Thus the name of our text: Using and Understanding Mathematical Ideas, which can be found in the bookstore.

**Course Goals:** Math 0824 is a General Education course designed to improve the level of quantitative awareness of students by using familiar situations that provide a sense of purpose for studying mathematics. The objective is not to make mathematicians of the students, but to help gain a mathematical perspective and deal as comfortably and critically as possible with an environment that increasingly makes use of quantitative reasoning. Throughout the semester, students will use critical thinking skills to help understand and solve problems in the following mathematical topics: Big and important numbers, making estimates, statistics, counting techniques, probability, expected value, voting systems, logic, and scaling.

**Topics Covered:** .) Numbers: -Big Numbers. -Converting units. -Making Estimates. -Anchoring Effect and Psychology. -Puzzles. .)Statistics: -Population, Sample space, frequency, Relative frequency. -Mean, Median, mode, standard deviation, variance. -Cumulative frequency. -tables and different graphs and charts. .)Probability -Combinations and permutations. -Basic concepts. -Conditional probability. -Expected Value/ random variable. .)Logic -Negation of statements. -Logic connectors. ( implies, equivalent, and, or ) -Truth table. .)Voting systems and Powers. -Different voting systems. -Power distributions. .)Scaling -Scaling :Volume, Area , and Length.

**Course Grading:** Grading is as follows: Five exams each worth 18 % (for a total of 90% of your grade), and Attendance/Classroom Participation/Homework at 10% combined. Grade breakdowns are as follows: 93 and higher .....A 90 to 92 .....A- 87 to 89 .....B+ 83 to 86 .....B 80 to 82 .....B- 77 to 79 .....C+ 73 to 76 .....C 70 to 72 .....C- 67 to 69 .....D+ 63 to 66 .....D 60 to 62 .....D- Below 60 .....F A grade of a C- or better is needed to pass or the grade dictated by your academic program. No make-up exams will be permitted. Please make proper arrangements/notifications with me BEFORE the date/time of each exam should legitimate and extenuating circumstances/emergencies keep you from taking the scheduled exam. No arrangements will be made after the exam is administered.

**Exam Dates:** First Exam : May ,24 2013 Second Exam: May ,31 2013 Third Exam : June ,14 2013 Fourth Exam: June ,21 2013 Fifth Exam : July ,1 2013.

**Attendance Policy:** Attendance Policy: Attendance is mandatory and will be taken on a regular basis. Only students there at the start of class will receive full credit for attendance.

**E-mail Policy:** E-mail is an official form of communication at Temple. You should check your e-mail regularly for any announcements.

**Electronic Devices:** Please make sure all electronic communication devices are turned off or silenced and put away

before class begins. Texting or checking messages during lecture is not permitted. Please avoid any behavior that may be a distraction to your fellow classmates.

**Things to remember:** Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at (215) 204-1280, 100 Ritter Annex, to coordinate reasonable accommodations for students with documented disabilities. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed at <http://policies.temple.edu>. Students will be charged for a course unless a withdrawal form is processed by a registration office of the University by the Drop/Add deadline date given below. For this semester, the crucial dates are as follows: • The first day of classes is Monday, May 20, 2013. • The last day to drop/add (tuition refund available) Monday, June 3, 2013. • The last day to withdraw (no refund) is Monday, June 17, 2013 . • The last day of classes is Monday, July 1, 2013. During the first two weeks of the semester, students may withdraw from a course with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions, the student may withdraw with the advisor's permission. The course will be recorded on the transcript with the instructor's notation of "W," indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses. No student may withdraw from more than five courses during the duration of his/her studies to earn a bachelor's degree. A student may not withdraw from the same course more than once. The grade 'I' (an "incomplete") is reserved for extreme circumstances. It is necessary to have completed at least 50% of the course work with a passing average and to file an incomplete contract specifying what is left for you to do. To be eligible for an 'I' grade you need a legitimate reason and you should have missed not more than 25% of the first nine weeks of classes. If approved by the Mathematics Department chair and the CST Dean's office, the incomplete contract must include a default grade that will be used in case the I grade is not resolved within 12 months.

Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at (215) 204-1280, 100 Ritter Annex, to coordinate reasonable accommodations for students with documented disabilities.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed [here](#).

Students will be charged for a course unless a withdrawal form is processed by a registration office of the University by the Drop/Add deadline date given below. For this semester, the crucial dates are as follows:

- The first day of classes is Monday, May 20.
- The last day to drop/add (tuition refund available) is Monday, June 3.
- The last day to withdraw (no refund) is Monday, June 17.
- The last day of classes is Monday, July 1.

During the first two weeks of the fall or spring semester or summer sessions, students may withdraw from a course with no record of the class appearing on the transcript. In weeks three through nine of the fall or spring semester, or during weeks three and four of summer sessions, the student may withdraw with the advisor's permission. The course will be recorded on the transcript with the instructor's notation of "W," indicating that the student withdrew. After week nine of the fall or spring semester, or week four of summer sessions, students may not withdraw from courses. No student may withdraw from more than five courses during the duration of his/her studies to earn a bachelor's degree. A student may not withdraw from the same course more than once. *Students who miss the final exam and do not make alternative arrangements before the grades are turned in will be graded F.*

The grade I (an "incomplete") is reserved for extreme circumstances. It is necessary to have completed almost all of the course with a passing average and to file an *incomplete contract* specifying what is left for you to do. To be eligible for an I grade you need a good reason and you should have missed not more than 25% of the first nine weeks of classes. If approved by the Mathematics Department chair and the CST Dean's office, the incomplete contract must include a default grade that will be used in case the I grade is not resolved within 12 months.

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