A working knowledge of the concepts of college algebra and trigonometry is essential for all parts of science, engineering, and technology. Many other courses, (e.g. business, economics, health sciences, and more), will require you to apply the mathematical tools you learn in your college algebra and trigonometry courses, so keep in mind that success in future courses may depend heavily on your ability to apply the material from MATH 15400.

OFFICIAL PREREQUISITE/COURSE DESCRIPTION: MATH 15400 Trigonometry (3 cr.) P: MATH 15300 (with a minimum grade of C) or equivalent. Fall, spring, summer. MATH 15300-15400 is a two-semester version of MATH 15900. Not open to students with credit in MATH 15900. MATH 15400 covers college-level trigonometry and, together with MATH 15300, provides preparation for MATH 16500, MATH 22100, and MATH 23100. **NOTE:** The prerequisite can be met by Math Placement up to MATH 16500.

MORE ON PREREQUISITES: It is assumed that you have recently mastered the material of MATH 15300 (College Algebra) with a grade of C or better within the last year. If this is not the case then you should talk to your instructor as soon as possible to decide if this is the correct class for you. The main reason people have difficulty with MATH 15400 is because of insufficient background. Again, if you are not sure if this is the right class for you, talk to your instructor early. It is not difficult to determine which class you should be in.

TEXTBOOK: The correct textbook for all sections of MATH 15400 is, *Algebra and Trigonometry with Analytic Geometry*, Classic 12th Edition, by Swokowski and Cole, with Enhanced WebAssign Access Card, ISBN: 9781305525849, Loose-leaf 3-ring textbook, Cengage Publisher. There are over a dozen different editions and formats of this textbook so it is important that you get the correct one. The required textbook may be purchased at the IUPUI Barnes & Noble Bookstore.

IUPUI DEPARTMENT OF MATHEMATICAL SCIENCES CALCULATOR POLICY:
- In all developmental and introductory courses at IUPUI numbered below MATH 16500, the only technology that can be used on in-class, closed-book assessments (quizzes, tests, final exam) is the Texas Instruments TI-30XA scientific calculator.
- In all calculus and calculus-related courses at IUPUI with numbers MATH 16500 or above, no calculators or other forms of technology can be used on in-class, closed-books assessments (quizzes, tests, final)
- For math/stat courses with numbers above MATH 26600, it is up to the instructor's discretion as to what forms of technology may be used on in-class, closed-book assessments.

MORE ON CALCULATOR POLICY: The TI-30Xa is the only calculator allowed on quizzes and exams. No other calculator is allowed in the classroom. It does not matter what you were allowed to use in your previous math course. Bring your TI-30Xa scientific calculator with you to every class period. The calculator slide cover must be removed and put away when taking an exam or quiz.

ATTENDANCE: Attendance is required of all students without exception. A student absent from class bears full responsibility for all material covered in class. Quizzes will be given at the beginning of class, so please be on time. If you anticipate having to leave class early, please let your instructor know before the beginning of class. Regular attendance is crucial for success in this course.
MATH HELP OUTSIDE OF CLASS: There will not be enough time to answer all questions from the homework assignments, tests, etc. If you need more time to ask questions there are several options for help that are available. First, you can seek help during your instructor’s office hours. Second, tutoring/mentoring is available in the Math Assistance Center (MAC). The MAC is located in Taylor Hall (UC), Room B001. To find out more about the tutoring/mentoring schedule and other general information about the MAC, check out the MAC web page (http://mac.iupui.edu). And lastly, private tutors are available. If you need more information about the above services you can call the Mathematics Department at (317) 274-6918, visit the Mathematics Department website at http://math.iupui.edu, or drop by the Mathematics Department Office at LD270.

STUDYING FOR THE CLASS: This is a college class and is much different than one taught in high school. We cover a lot of material and have limited time in class. You should expect to spend at least two hours studying on your own for each hour spent in class. Read the section(s) to be covered in class before the lecture. Read the section, not like a novel, but like instructions for putting together a clock--very slowly and carefully. Make sure every word makes sense. The most important part of your learning of the material will be the time you spend working outside of class. You cannot expect to digest the material from just seeing it explained in class. Sometimes it will click and the lecture will have been useful--other times the lecture will not make sense until you go over the material later. Talking about mathematics with classmates is very useful.

HOMEWORK: Homework is very important in any math course. There will be daily nongraded textbook assignments and it is important that you do them as the material is covered. We will only have time to go over a few problems from each section in class, but the answers to the odd numbered problems are in the back of the book. However, you should try to work through all problems by yourself before consulting the answers in the book or from a solution manual. There is also an on-line WebAssign system with exercises tied to the textbook that you may wish to use for additional homework practice. Homework (textbook or WebAssign) is not collected or graded. However, exercises for the quizzes in this course will be taken directly from those on your recommended textbook homework list. Periodically reviewing errors on old papers is a valuable study skill.

To perform as well as you can in this class, you should expect to spend several hours each day working problems and reading the sections before they are discussed in class. After working through a set of problems, sit back and ask yourself what you have just learned. Is there a common thread, concept, or technique that runs through the problem set? All problems (Homework, Quiz, and Exam) should be done completely, neatly, and accurately.

QUIZZES: To receive full credit for quiz problems you must show all your work. If you are absent the day of a quiz, that quiz will be counted as zero. During the course, you may find that you must be absent the day of a quiz due to a personal situation, for example, personal or family illness, accident, business trip, etc. For this reason, you are allowed to drop your 2 lowest quiz scores. THERE WILL BE NO MAKE-UP QUIZZES. NO EXCEPTIONS. SO USE YOUR DROP QUIZZES WISELY. Quizzes will be given at the beginning of class time, so please try to be in your seat before the class period begins (less disruption to others). Total quiz score is weighted the same as one exam. If your work on quizzes or exams is illegible, no credit will be given.

EXAMS: To receive full credit for exam problems you must show all your work. There will be four in-class exams. Each exam will be based on 100 points. If you are absent the day of an exam, that exam will be counted as zero. During the course, you may find that you must be absent the day of an exam due to a personal situation, for example, personal or family illness, accident, business trip, etc. For this reason, you are allowed to drop one exam score. THERE WILL BE NO MAKE-UP EXAMS. NO EXCEPTIONS. SO USE YOUR DROP EXAMS WISELY. No make-ups will be given except for the following documented situations: 1) IUPUI sponsored event, for example athletic competition, 2) Military training or deployment, and 3) Jury duty. Documentation must be provided in advance.

The purpose of the drop exam and drop quizzes is not to boost your grade, but rather to give you some flexibility in the event a personal situation prevents you from being present on the day of an exam or quiz.
FINAL EXAM: The common departmental final exam will be on Friday, April 27, 2018, from 6:00P-8:00P. The location will be announced later. The final exam is a departmental comprehensive exam. It will be worth 200 points, i.e., it will be weighted the same as two in-class exams. **Be sure that you do not have a conflict (work, personal, or class) with the time and date of the common departmental final exam.** No make-ups will be given except for the following documented situations: 1) IUPUI sponsored event, for example athletic competition, 2) Military training or deployment, and 3) Jury duty. Documentation must be provided in advance. More information about the common departmental final exam (practice problems, practice finals, etc.) can be found on the Mathematics Department’s course web pages (math.iupui.edu/math/undergraduate/courses). The IUPUI departmental final exam schedule can be found at: registrar.iupui.edu/accal.html.

**REMINDER:** To receive credit for quiz and exam problems you must show all your work. Check your answers carefully before submitting your quiz/exam. Problems involving units must have the units represented on the answer to receive full credit. Keep all returned graded quizzes and exams until after you receive your final course grade.

**GRADING:** To perform well in this course you must not only understand the mathematical concepts, you must be able to use them correctly in solving problems. Accurate computations go together with understanding the method. MATH 15300-15400 is a prerequisite for MATH 16500-16600, *Analytic Geometry and Calculus I & II*, MATH 17100, *Multidimensional Mathematics*, MATH 22100-22200, *Calculus for Technology I & II*, MATH 23100-23200, *Calculus for Life Sciences I & II* and all physics courses. It is important to get into the habit (the earlier the better) of checking your work before submitting it to be evaluated by someone else. You will find this habit to be very valuable in your later courses.

**GRADES:** Your letter grade for the course will be determined from your total scores which will be computed as follows. Exam scores and/or the final course grades may be adjusted.

<table>
<thead>
<tr>
<th>TOTAL POSSIBLE POINTS</th>
<th>GRADES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best 3 out of 4 in-class exams</td>
<td>300</td>
</tr>
<tr>
<td>Quizzes</td>
<td>100</td>
</tr>
<tr>
<td>Final exam</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
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</tbody>
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Pluses and minuses will be awarded on the final grades as follows:

- 90-92% A-, 93-96% A, 97% and above A+
- 80-82% B-, 83-86% B, 87-89% B+
- 70-72% C-, 73-76% C, 77-79% C+
- 60-62% D-, 63-66% D, 67-69% D+
- 0-59% F

**IUPUI CAMPUS-WIDE POLICIES:** Students are expected to read carefully the IUPUI policies concerning attendance, academics, and conduct. **Students are expected to visit the Office of the Registrar's website for university policies at registrar.iupui.edu/course_policies.html within the few days of classes as some policies have early deadlines.** Information on university campus-wide course policies related to attendance (Administrative Withdrawal, Disabilities, Emergency Withdrawal, Military Service, Religious Holidays), academic policies (Auditing a class, Final Exam Scheduling, Grade Replacement, Grade Forgiveness, and Pass/Fail Option), and conduct (Academic Integrity, Academic Misconduct, and Code of Conduct) and related policies can also be accessed in Canvas under the “Syllabus Supplement”, “Campus Course Policies” and “IUPUI Academic and Student Support Services” links.
ADMINISTRATIVE WITHDRAWAL: A basic requirement of this course is that you will participate in all class meetings and conscientiously complete all required course activities and/or assignments. Keep in touch with me if you are unable to attend, participate, or complete an assignment on time. If you miss more than half of the required activities within the first 25% of the course without contacting me, you may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and if you are administratively withdrawn from the course you will not be eligible for a tuition refund. If you have questions about the administrative withdrawal policy at any point during the semester, please contact your instructor.

LAST WITHDRAW DATE: Last day to withdraw with automatic grade of W is Sunday, March 11, 2018. Requires advisor approval via the late drop/add classes link in One.IU. UCOL students or Engineering/Technology freshmen must see advisor by 5:00PM on the prior Friday. In person transactions must be processed by 5:00P on the prior Friday (March 9, 2018).

Beginning March 12, 2018, drops will be approved only in serious, extenuating circumstances and requires the approval of the student’s advisor, instructor, Chair or Associate Chair in Mathematics, and the School of Science Dean’s Office. If you stop attending class without officially withdrawing by the last withdraw date, your grade will be an F for the course. If you find it necessary to withdraw from the course, we encourage you to first talk to your instructor or to your advisor so that they can assist you in deciding what alternative options best fit your needs. Students should read carefully the withdraw information found on the Registrar’s website (registrar.iupui.edu) under the Academic Calendar.

INCOMPLETES: A grade of “Incomplete” (I) will only be given in accordance with the Department of Mathematical Sciences Grade of Incomplete Policy. An incomplete (grade of I) is only allowed for special circumstances: the student must have a passing grade in 75% of the course work. Specifically, students must be passing at the 3/4 mark of the session to qualify for assigning an incomplete. The instructor must agree that an incomplete is appropriate and it must be approved by the Associate Chair of the Department of Mathematical Sciences.

IUPUI POLICY ON DISABILITY ACCOMMODATIONS Students needing accommodations because of disability will need to register with Adaptive Educational Services (AES) and complete the appropriate forms issued by AES before accommodations will be given. The AES office is located in Taylor Hall, UC 100. You can also reach the office by calling 317-274-3241.

IUPUI POLICY ON RELIGIOUS HOLIDAYS IUPUI respects the right of all students to observe their religious holidays and will make reasonable accommodation, upon request, for such observances. Students seeking accommodation for religious observances MUST submit a request in writing to the course instructor by the end of the second week of the semester and should use the Request for Course Accommodation Due to Religious Observance Form. More information on the IUPUI Policy on Religious Holidays is available here: registrar.iupui.edu/religious.html. Failure to comply with the university policy will result in no accommodations given later in the semester.

IUPUI POLICY ON ACADEMIC INTEGRITY: The IU Code of Student Rights, Responsibilities, and Conduct states that students must uphold and maintain academic and professional honesty and integrity; the code defines academic misconduct as any activity that tends to undermine the academic integrity of the institution. Students engaging in academic misconduct may therefore receive penalties from their course instructor and disciplinary action from the university. Policies against academic misconduct apply to all course-, department-, school-, and university-related activities. Academic misconduct may involve human, hard-copy, or electronic resources and includes but is not limited to the following: cheating, fabrication, plagiarism, interference, violation of course rules, and facilitating academic dishonesty. For definitions of these activities, visit studentcode.iu.edu/responsibilities/academic-misconduct.html. Additional information about the rights and responsibilities of IU students is available at studentcode.iu.edu/.

FLAGs EARLY STUDENT PERFORMANCE ALERT: This semester your instructor will be using the FLAGs System to provide real-time feedback on your performance in this course. Periodically throughout the semester the instructor will be entering data on factors such as your class attendance, participation, and success with coursework, among other things. This information will provide feedback on how you are faring in the course and offer you suggestions on how you might be able to improve your performance. You will be able to access this information in the student center: One.IU > Student Center > My Academics and Grades > My Grades.