

Root Cause Analysis (Spring 2023)

MME 4332 – CRN: 26603

MME 5390 – CRN: 27356

MASE 6390 – CRN: 26899

Professor: Darren M. Cone

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(915) 747-5785

Office Hours: T-Th 9 - 10:30am (or by appointment) in M-201B

COURSE DESCRIPTION

Using analytical techniques to determine underlying causes and causal factors related to materials, component and systemic problems. Analytical tools and techniques will be used to identify problems and track data used to determine the root and proximate cause and to implement corrective actions. This course will be structured around the use of the SOURCE methodology (Seeking Out the Underlying Causes of Events) from ABS Consulting.

Prerequisites: MME1205 and MME2303 with a grade of “C” or better.

COURSE MEETING TIMES AND LOCATIONS

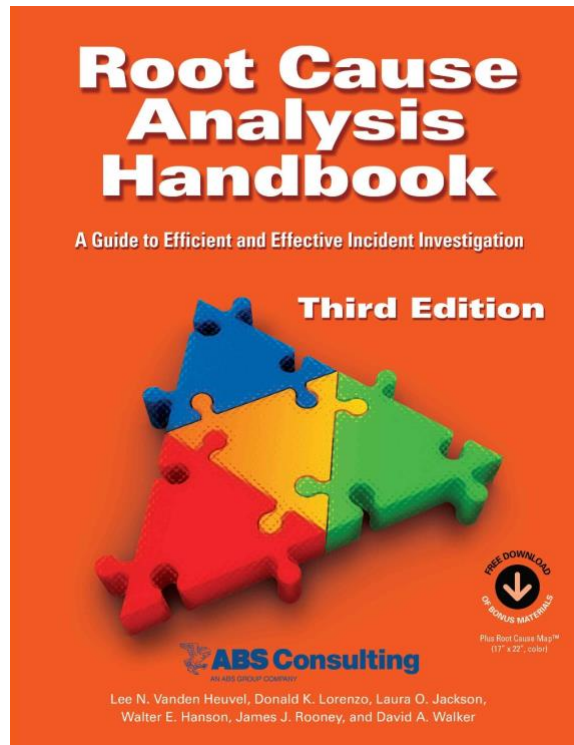
T-Th 12-1:20pm Education 301

TOPICS TO BE COVERED

- Initiating an incident investigation
- Incident classification and categorization
- Data gathering techniques, formats, handling physical evidence associated with an incident
- Analyze incidents to determine causal factors
- Documenting causal factors and root causes to enable recommendations of preventative measures
- Archiving findings and recommendations to allow review and trending of incident patterns

REQUIRED MATERIALS

Root Cause Analysis Handbook, Third Edition, by Vanden Heuvel, et.al., Rothstein Publishing (2014). ISBN: 978-1931332514.



COURSE ASSIGNMENTS AND GRADING

Assignments for this course are assessed according to rubrics. You can find these rubrics by clicking on the appropriate assignment link in Blackboard and choosing to “View Rubric” from the button beneath the Points Possible for the assignment.

Grade Distribution:

100-90 = A 89-80 = B 79-70 = C 69-60 = D 59 and Below = F

60% Exams (x3) (20% each)
20% Homework Assignments
20% Final Exam - Comprehensive

Note: Students enrolled in the MME 5390 and MASE 6390 sections of this course will be subjected to more rigorous, comprehensive and exhaustive assignments and examinations, in accordance to their respective academic levels (MS vs PhD). However, the grade distribution scale and breakdown will remain the same for all sections of this course.

DEADLINES FOR HOMEWORK ASSIGNMENTS

All homework assignments and/or extra credit exam solutions must be uploaded to Blackboard by 11:59 PM (mountain) on the due date listed. Late submissions will not be accepted and will be given a grade of zero.

I strongly encourage you to NOT wait until the last minute to submit assignments and exams to avoid delays due to technical issues, and to give yourself time to contact the Help Desk to resolve any issues encountered. I will only accept email submissions or assignments or exam solutions in the case of truly exceptional circumstances.

ATTENDANCE AND PARTICIPATION

Attendance in the course is determined by participation in the learning activities of the course. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by completion of the following activities:

- Regular attendance to the classroom sessions, less than 5 minutes after the scheduled lecture start time
- Reading/viewing all course materials in advance to ensure understanding of assignment requirements
- Participating in engaging discussion with your peers during classroom discussions
- Other activities as indicated in the weekly lecture modules
- Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

COURSE DROP POLICY

According to UTEP Curriculum and Classroom Policies, “When, in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of “W” before the course drop deadline and with a grade of “F” after the course drop deadline.” See academic regulations in the UTEP Undergraduate Catalog for a list of excused absences. Therefore, if I find that, due to non-performance in the course, you are at risk of failing, I will drop you from the course. I will provide 24 hours advance notice via email.

Alternatively, if you feel that you are unable to complete the course successfully, please let me know and then contact the [Registrar’s Office](#) to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.

ACCOMMODATIONS POLICY

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the [UTEP Center for Accommodations and Support Services](#) (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at cass@utep.edu, or apply for accommodations online via the [CASS portal](#).

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the [Office of Student Conduct and Conflict Resolution \(OSCCR\)](#) for possible disciplinary action. To learn more, please visit [HOOP: Student Conduct and Discipline](#).

PLAGIARISM DETECTING SOFTWARE

Some of your course work and assessments may submitted to SafeAssign, a plagiarism detecting software. SafeAssign is used review assignment submissions for originality and will help you learn how to properly attribute sources rather than paraphrase.

COPYRIGHT STATEMENT FOR COURSE MATERIALS

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

STUDENT RESOURCES

Technology Resources:

[Help Desk](#): Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus.

Academic Resources:

[UTEP Library](#): Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.

[University Writing Center \(UWC\)](#): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.

[Math Tutoring Center \(MaRCS\)](#): Ask a tutor for help and explore other available math resources.

[History Tutoring Center \(HTC\)](#): Receive assistance with writing history papers, get help from a tutor and explore other history resources.

[RefWorks](#): A bibliographic citation tool; check out the RefWorks tutorial and Fact Sheet and Quick-Start Guide.

Individual Resources:

[Military Student Success Center](#): Assists personnel in any branch of service to reach their educational goals.

[Center for Accommodations and Support Services](#): Assists students with ADA-related accommodations for coursework, housing, and internships.

[Counseling and Psychological Services](#): Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.