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**How to Read and Interpret a Gear Inspection Chart**

**INSTRUCTOR:**

**William ‘Mark’ McVea**

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| **COURSE INFORMATION** |

**Course Description**

This half-day online seminar is intended to provide you with a thorough understanding of the information contained within a typical gear inspection report.  Specifically, we will look at the contents and meaning of the information contained within the gear charts, as well as the techniques used by the gear measurement system to assess gear quality.  An explanation of basic gear measurement techniques, how measurement equipment and test machines implement these techniques, and how to interpret the results from these basic measurements will be covered.  We will also discuss how to interpret the results and what corrective actions may be considered if the quality of a particular gear is unsatisfactory.

**Who Should Attend**

This course will appeal to anyone who is interested in the measurement and inspection techniques of gears, gear systems, and gear charts.

**Learning Objectives**

* Describe the measurement and inspection techniques used to qualify a gear
* Explain the major contributing factors to gear quality
* Describe in detail the practical gear measurement and inspection techniques
* Categorize the common tools and equipment used to measure and inspect gears
* Discuss some of the new and automated gear design systems

**Required Textbook**

**Textbook will be provided by AGMA**

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| COURSE OUTLINE |

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| Why measure gears  What is conjugacy and transmission error  Simple basic measurement techniques and tools  Complex elemental measurement techniques and tools  Errors, tolerance, and interpretation  Measurement systems, tools, techniques  Measurement results and interpretation  GMM inspection chart, how to read, how to interpret |

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| **STUDENT FEEDBACK AND GRADING PROCEDURES** |

**Assignments**

There will be a short self-graded quiz at the end to show knowledge transfer.

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| COURSE MANAGEMENT |

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| COURSE MANAGEMENT |

**Weather Delays and Cancelations**

We will communicate any cancellations, delays or other concerns for safety prior to class via email, voicemail, and/or text message. Please be sure that we have all pertinent contact information as you travel to your class location.

**Attendance for Domestic and International Students**

Please be mindful that these are short, accelerated courses. Attendance is extremely important. If you are going to be absent from any class day, please contact the course coordinator.

**Plagiarism, Cheating and other types of Misconduct**Plagiarism[[1]](#footnote-1), cheating and other types of misconduct are unacceptable.

**Students with Disabilities**Students requiring assistance and accommodation should complete the [Special Accommodation Request form](http://www.graduateschool.edu/images/stories/AcademicPrograms/AdmissionsApplicationGuideD3.pdf) and submit it to Stephanie Smialek, Education Manager at [smialek@agma.org](mailto:smialek@agma.org). She can be reached at 773-302-8026.

**Grievance Procedures**Students who have concerns about the class are encouraged to contact Stephanie Smialek, Education Manager, at [smialek@agma.org](mailto:smialek@agma.org) or 773-302-8026.

**Outline Changes**The instructor reserves the right to modify the outline during the course of the class.

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| LEARNING AND OTHER RESOURCES |

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**Links for writing resources:**

* grammar.ccc.commnet.edu/grammar
* [www.merriam-webster.com](http://www.merriam-webster.com)

**Links for Math resources:**

* [www.sosmath.com](http://www.sosmath.com)
* Khan Academy on www.youtube.com

**Links for time management, study skills and note taking resources:**

* [www.mindtools.com](http://www.mindtools.com)
* [www.testakingtips.com](http://www.testakingtips.com)

**Links for career resources:**

* <https://www.agma.org/newsroom/jobs/>

**Industry News:**

* https://www.agma.org/newsroom/industry-news/

1. Plagiarism is defined as “the use or close imitation of the language and thoughts of another author and the representation of them as one’s own original work.” [↑](#footnote-ref-1)