ETL 545 Syllabus
Information Measurement Theory (IMT)
Spring Semester 2017
3 Credits

Prerequisites: Graduate Student Status
Time: Wednesdays 6-8:40pm

Department Address:
Knoblauch 135
1 University circle
Macomb, IL 61455-1390

Instructor Info:
Dr. Brian Stone
Knoblauch 339
(309) 298-2388
b-stone@wiu.edu

Office Hours:
M/W 10-12noon or by appointment (Knoblauch Room 335)
Non-office hour appointments available upon request

Course Textbooks:

Course Description
This course is designed to give an overview of tools and approaches to Measurement and its application in various contexts. Initially it gives a foundation of measurement types followed by the applied use of measurement tool combinations which are used in areas of procurement, project management and overall organizational assessment. As a part of the course, students will be educated on a leading practice of organizational measurement known as Information Measurement Theory (IMT). This will teach its users of methods to find simplified answers to important questions in the midst of infinite amounts of data. As a result, students will be able to investigate ways to analyze reality and problems occurring in every industry, and find the simple and logical solutions that can be applied to everyday work.

Department of Engineering Technology Goals for Student Learning
Engineering Technology (including Construction Management, Graphic Communication, Engineering Technology) is a field of study designed to provide students educational programs that allow them to communicate effectively, design and apply technical solutions, use technology effectively, and respond to project management tasks in an environment with continually changing and sophisticated technology in an increasingly competitive global marketplace. Additionally, students must be given the understanding and tools to help them to successfully oversee “knowledge workers” in industry. These workers have high levels of technical expertise in their fields and must be both lead and managed
towards organizational goals of their company, sector or research group.

_By graduation, Engineering Technology students should be able to:_
1. Think critically and creatively;
2. Understand the theoretical principles of the profession;
3. Understand and apply relevant technology in the solution of technical problems;
4. Organize, manage, and maintain projects;
5. Develop an appreciation for ethical and professional practices;
6. Develop and refine oral, written, and visual communication skills; and
7. Demonstrate an overall competency in the program objectives.

9. Course Objectives

- Review and strengthen the understanding of spreadsheet use, analysis and presentation
- Practice the simplification of various complex data scenarios
- Practice the ability to change focus between the detailed technical to the broad general perspective information
- Classify and understand individuals for the sake of making decisions
- Identify and utilize dominant information
- Identify reality through the use of information

Last Day to Drop Course: Within 2 weeks of the first day of class

Course Requirements
Attendance & Appropriate Classroom contribution
Other presentations
Homework Assignments
Assigned Presentations (3 presentations)
Final paper and Presentation

Method(s) of Evaluation/Assessment

- Attendance Tracking based off of policy
- Grading of written papers by professionalism, articulation and formatting
- Presentation formats, delivery, effectiveness
- Compilation of comprehensive documents

Final Examination – Time and date prescribed on university final exam schedule. Any exceptions to the final exam schedule _must_ be approved by department chair and the Dean of the College of Business and Technology in writing including student’s name, ID#, and signatures.

Rules for Giving an Incomplete

WIU policy – A temporary symbol of I (Incomplete) for a course may be given only when a student, due to circumstances beyond his or her control, has been unable to complete the course requirements within the official limits of the term. The circumstances must be documented to the instructor’s satisfaction.
Academic Integrity

Preamble

Western Illinois University, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. Students have rights and responsibilities (http://www.wiu.edu/provost/students/) and students should realize that deception for individual gain is an offense against the members of the entire community, and it is the student's responsibility to be informed and to abide by all University regulations and policies on Academic Integrity.

Plagiarism, cheating, and other forms of academic dishonesty constitute a serious violation of University conduct regulations. Students who engage in dishonesty in any form shall be charged with academic dishonesty.

It is a duty of faculty members to take measures to preserve and transmit the values of the academic community in the learning environment that they create for their students and in their own academic pursuits. To this end, they are expected to instill in their students a respect for integrity and a desire to behave honestly. They are also expected to take measures to discourage student academic dishonesty, to adjust grades appropriately if academic dishonesty is encountered, and, when warranted, to recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of the faculty; administrative sanctions are under the authority of the Director of Student Judicial Programs. This document provides policies and procedures to be followed when academic dishonesty is encountered.

Definitions of Academic Dishonesty

The following definitions and examples are not meant to be exhaustive. The University reserves the right to determine, in a given instance, what action constitutes a violation of academic integrity. (See www.wiu.edu/policies/acintegrity.php for complete descriptions of the following topics:

Plagiarism, Fabrication and Falsification, Cheating, Complicity in Academic Dishonesty, Abuse of Academic Materials, Multiple Submissions

Reporting Academic Dishonesty

All members of the University community share the responsibility and authority to challenge and make known acts of apparent academic dishonesty. Any student, faculty member, or staff person who has witnessed an apparent act of student academic dishonesty, or has information that reasonably leads to the conclusion that such an act has occurred or has been attempted, has an ethical responsibility for reporting said act(s). Confronting and reporting academic dishonesty can be done in a variety of ways, and people should choose the manner most appropriate for the circumstances. Acts of apparent academic dishonesty that occur in the classroom should be reported directly to the course instructor, and/or the course instructor's Department Chair, and/or the instructor's College Dean. The Council on Admission, Graduation, and Academic Standards (CAGAS) or the Graduate Council will not accept or act upon anonymous reports, but will hold in strict confidence the identity of any person reporting a suspected instance of academic dishonesty, unless that person consents to having his/her identity revealed.
Use of Internet resources:
Most of my out-of-class communications will be through the university email system. However, if it is more appropriate and feasible to use other methods, they will be established in class. Additionally, a single “Master link” will be given through the University class website. This link will refer you to all of the shared course slides, assignments and progress reports.

Suggested Readings
A book list will be provided to the class from which each student will pick and read one book. However, each of the book list items are considered excellent and recommended as guides to further the students understanding of leadership as a topic of study.

Access & Disabilities
In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s), you must obtain documentation of the need for an accommodation through Disability Resource Center and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Resource Center at 298-2512 or disability@wiu.edu for additional services.

If you have emergency medical information to share with me, if you need special arrangements in case the building must be evacuated, or if you need accommodations in this course because of a disability, please make an appointment with me as soon as possible. My office location and hours are at the top of this syllabus. If you plan to request disability accommodations, you are expected to register with the Disability Resource Center (DRC) at 298-2512.

Online Absence Reporting System (OARS)
In accordance with WIU University Senate policy; students are to report any absences through OARS. Beu Health Center will no longer issue documentation of absence due to illness.

Resolution of Problems
Should a problem occur, students should speak to their instructor first. If the problem is not resolved, meet with the chair of the department. If the problem continues to be unresolved, go to the College of Business and Technology's Dean.

Students should observe the following sequence for the resolution of problems:

Student --- Instructor --- Chairperson --- Dean
## Topical Outline (Order is Tentative)

<table>
<thead>
<tr>
<th>Week/Module</th>
<th>Text/Material</th>
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<tbody>
<tr>
<td>1.</td>
<td>Introduction to Course</td>
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<td>2.</td>
<td>Measurement in Industry</td>
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<td>3.</td>
<td>Rubrics Development</td>
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<td>4.</td>
<td>Spreadsheets I: Introduction &amp; 3 SS Components</td>
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<td>5.</td>
<td>Spreadsheets II: Finance &amp; Accounting</td>
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<td>7.</td>
<td>Spreadsheets IV: Probability Scenarios</td>
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<td>8.</td>
<td>Spreadsheets V: Cloud-Based Sharing</td>
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<td>9.</td>
<td>Spreadsheets VI: Data Collection &amp; Reporting</td>
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<tr>
<td>10.</td>
<td>Measurement in Industry Overview: IMT</td>
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<td>11.</td>
<td>Solution Models (KSM)</td>
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<td>12.</td>
<td>Influence and control</td>
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<td>13.</td>
<td>Utilizing Expertise</td>
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<td>14.</td>
<td>Transparency &amp; Dominant Information</td>
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<td>15.</td>
<td>Performance Information Procurement System</td>
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<td>16.</td>
<td>Performance Information Reporting</td>
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## Course Assessment Summary

<table>
<thead>
<tr>
<th>Points Available</th>
<th>Total %</th>
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<tbody>
<tr>
<td>10 Labs</td>
<td>100</td>
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<tr>
<td>3 Presentations</td>
<td>50</td>
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<tr>
<td>Participation and Other Scoring</td>
<td>16.7</td>
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<tr>
<td>Total</td>
<td>166.7</td>
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