**Course number and name: MTSE 4910: Materials Science Research**

**Credits and contact hours**

1-3 Credits. Walk in or by appointment

**Instructor’s or course coordinator’s name**

Instructor: All Materials Science and Engineering Faculty

**Text book, title, author, and year**

Reporting Results: A Practical Guide for Engineers and Scientists, by: David C. van Aken & William F. Hosford, Cambridge University Press, 2008 - OPTIONAL.

1. *Other supplemental materials*

As provided by instructor.

**Specific Course Information**

1. *Brief description of the content of the course (catalog description)*

Introduction to research; may consist of an experimental, theoretical, or review topic.

1. *Prerequisites or co-requisites*

Consent by department.

1. *Indicate whether a required, elective, or selected elective course in the program*

Elective.

**Specific goals for the course**

1. *Specific outcomes of instruction*
2. *Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.*

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|  | **Program/ABET Outcome** | **a** | **b** | **c** | **d** | **e** | **f** | **g** | **h** | **i** | **j** | **k** |
| **Specific Course Learning Outcome** |  |  | **x** |  |  |  | **x** | **x** |  | **x** | **x** | **x** |
| 1. Apply knowledge gained at UNT while working on applied problems or applications.
 |  |  | **x** |  |  |  |  |  |  | **x** | **x** | **x** |
| 1. Work in teams to solve applied problems or develop materials for applications.
 |  |  | **x** |  |  |  | **x** | **x** |  |  |  | **x** |
| 1. Communicate industrially motivated problems and solutions.
 |  |  | **x** |  |  |  | **x** | **x** |  | **x** | **x** |  |

**Brief list of topics to be covered**

Will vary by instructor.

In general at a minimum, the following instruction will be provided:

* Safety
* Experimental methods
* Report data
* Technical writing

Students will be taught in an immersive environment.