EXPANDED COURSE DESCRIPTION
EARTH, SPACE SCIENCE AND ENGINEERING
Lassonde School of Engineering
Earth and Space Science and Engineering
LE / ESSE 2620 3.0 SECTION A
FUNDAMENTALS OF SURVEYING
FALL 2017 / WINTER 2018

COURSE CALENDAR DESCRIPTION
Coordinate systems, conventions and transformations. First and second geodetic problems: trig sections, traverses, eccentricities, areas. Distance measurements, angular measurements, heights. Topographic mapping and property surveys. Route surveying. Introduction to other surveys: alignment, deformation surveys for buildings, bridges, dams, tunnels, pipelines. Two lecture hours per week and three laboratory hours per week. One term. Three credits. Prerequisites: LE/ESSE 1012 3.00; SC/MATH 1014 3.00 and SC/MATH 1025 3.00 OR SC/MATH1018 SC/MATH1020; LE/ESSE 2615 3.00 or LE/ENG2110 2.00; or permission of the course instructor. Prior to Summer 2013: Prerequisites: LE/EATS 1010 3.00; SC/MATH 1014 3.00; SC/MATH 1025 3.00; SC/EATS 2610 2.00 or SC/ENG2110 2.00; or permission of the course instructor.

INSTRUCTOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
<th>Contact Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wang, Jianguo</td>
<td>Sec. A / LECT / F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ADDITIONAL INFORMATION

COURSE CONTENT
1. Basics of Surveying and mapping.
2. Basics of error analysis.
3. Distance measurements.
4. Leveling.
5. Angle and direction measurements.
6. Basic control surveys.
7. Topographical Mapping, control and topographic surveys.
8. Route surveying.
10. Survey operations.

TEXT

SUGGESTED BIBLIOGRAPHY

**ACADEMIC INTEGRITY LINKS**
- Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
- Academic Integrity - http://lassonde.yorku.ca/academic-integrity

**STUDENT LINKS**
- Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
- Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
- Counselling and Disability Services - http://cds.info.yorku.ca/

Many courses utilize Moodle, York University's course website system. If your course is using Moodle, click here to access it.

**Moodle @ York University**