

# **Advanced Field Surveys**

(EATS 3660/ENG 3160)

Dr.-Ing. Jian-Guo Wang  
August 2004

Geomatics Program  
York University

## **COURSE OUTLINE**

EATS 3660/ENG 3160 Advanced Field Surveys is a two-week course that is divided into a one-week field camp and a one-week data processing in Engineering Lab.

The tasks at Camp include planning, logistics of survey operations, precise spirit levelling and high accuracy of control surveys. Emphasis is placed on practical and professional experience of all the necessary procedures of a survey project, from planning, pre-analysis, observations, data processing to result delivery.

The director of Advanced Field Surveys will be Dr.-Ing. Jian-Guo Wang. Any concerns regarding this course may be directed to him.

## **DATES AND REGISTRATION**

Advanced Field Surveys is scheduled for Saturday, August 21 – Friday, September 03, 2004.

Students are required to arrive in Eng. Lab, York University and report to the Camp Director by 11:00AM Saturday August 21, 2004. The final reports will be due two weeks later.

To attend this course, students must be officially registered in EATS 3660/ENG 3160. Prerequisites for this course are all third year Geomatics Engineering courses or the permission of the EA faculty head. The registration should be completed through the registrar's office as usual.

## **CAMP LOCATION**

The one-week field practice will take place on campus of York University for planning, pre-analysis and instrument testing and calibrations, and then at Algonquin Radio Observatory, National Resources Canada from August 21 to August 27, 2004. Students will spend the second week in Eng. Lab.

## **FEES**

There are no additional course fees. Students will have to pay their transportation expenses (partially) and food expenses.

## **ACCOMMODATION**

The Geodetic Surveys Division of NRCan will provide the ARO facilities free of charge. Students will be expected to read carefully the ARO access agreement and sign a waiver form to be allowed to access the facility.

## **TRANSPORTATION**

The faculty will coordinate the students to make an arrangement for travel TO and FROM the Algonquin Radio Observatory.

## **CLOTHING AND PERSONAL EQUIPMENT**

The following list of items is considered essential:

- (1). Usual clothing and personal effects for five days stay.
- (2). Towel and bath kit.
- (3). Sleeping bag/blanket.
- (4). Hat, sunglasses or other sun protection.
- (5). Adequate footwear for field use.
- (6). Sunscreen, insect repellent.
- (7). Wet and cold weather protection – a good waterproof jacket or coat.
- (8). Drinking water bottle.
- (9). Electronic calculator.
- (10). Usual drawing/writing equipment, scales (field books, recording sheets etc.).

Students are aware of the weather from the previous camp there and should be able to prepare to cope with the weather out there.

## **TEXTBOOKS AND REFERENCES**

James M. Anderson & Edward M. Mikhail (1998): Surveying – The Theory and Practice, seventh Edition, McGraw-Hill, Toronto, 1998.

Copies of additional reference papers.

## **MEDICAL, HOSPITAL AND AMBULANCE COVERAGE**

Students are advised that it is their own responsibility to ensure that they are adequately insured against medical, hospital and ambulance costs in the event of sickness or accident. The York University and the Faculty of Pure and Applied Science cannot be held responsible for any such costs, which might be incurred during the survey camp period. All students attending camp, especially those not officially resident within the province of Ontario, should carefully check with the appropriate authorities to be sure they are adequately covered.

## PERSONAL ASPECTS

If you anticipate any difficulties for any religious, medical, or other reasons in participating in the normal course schedule, or if for whatever reasons you have special requirements regarding meals, please contact the Camp director well in advance.

## SAFETY

No Job is so important and no service so urgent that we cannot take time to perform our work safely. The following is not intended to be an all-inclusive capsule of safety requirements.

1. Students comply with all safety regulations, policies of York University.
2. Wear personal protective equipment in all designated areas or when otherwise directed to do so.
3. Immediately report to Camp Director if any safety incident occurs or may occur.
4. Each individual at Camp has the responsibility and obligation to the other group members to work safely. If one sees another one perform an unsafe act, they should call this to the other person's attention, whether the unsafe act affects only the individual or the whole team.
5. The equipment used at Camp has the potential to become very hazardous objects and must be properly secured for travel.
6. The survey instruments used at Camp should be protected from any potential damage.

We look forward to sharing an interesting, enjoyable and valuable experience with you at Advanced Field Surveys.

Jian-Guo Wang  
Camp Director

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