



T.R.
İSTANBUL UNIVERSITY
FACULTY OF FORESTRY
CURRICULUM FORM
Syllabus



Number : _____ Date : 06.04.2015
Department : FORESTRY ENGINEERING, UNDERGRADUATE PROGRAM,(FORMAL EDUCATION)
Academic Year : 2013 - 2014

| | | | | | | | |
|---|--------|--|----------|------------------|------|-----------------|-------------|
| Course Name : | | FOREST ROADS | | | | Course Code : | ED04B017 |
| Semester | Theory | Practice | Lab | Credit | ECTS | Course Language | Course Type |
| 5 | 2 | 2 | 0 | 3 | 3 | Turkish | Required |
| Admission Requirements : | | Koşul Mevcut Değil | | | | | |
| Compulsory Attendance : | | Theory | Practice | Lab | | | |
| | | 70 % | 80 % | 0 % | | | |
| Course Teacher(s) : | | Prof. Dr. MESUT HASDEMİR | | | | | |
| Course Content : | | The importance of forest roads for forestry work, forest road planning, construction, periodic maintenance and repair works, occupational knowledge and occupational safety in road construction, the cost of forest roads construction, forest roads structures, using machines in forest roads construction, cost analysis of machines, forest roads and drainage, drainage structures. | | | | | |
| Course Learning Outcomes : | | - Knows the importance of forest roads for forestry. - Make forest road network plans - Knows the forest road construction techniques - Join road construction works - Knows occupational knowledge of forest road construction works, ergonomics and occupational safety. - Make road cost analysis - Make plan road structures - Knows drainage facilities - Knows construction of road structures - Knows road construction machinery - Implement periodic maintenance and repair works | | | | | |
| Teaching and Learning Methods : | | Presentation, discussion, question-answer, project work | | | | | |
| Continuous Improvement in the Context of the courses (questionnaires, interviews, and so on.) Front Shown Measurement and Evaluation Tools and Objectives : | | The survey is at the end of the year abroad, the international equivalent of courses taken, the students have a talk with the public and the private sector and information obtained by a call in basis, and the lesson with examples of current issues and international to be equivalent to the work is used. | | | | | |
| Contribution of Learning Outcomes on Program Competency : | | The course enhances the ability to use theoretical and practical forest engineers, contribute to solving current and future problems, to impart the ability to select and use modern techniques and tools, office applications, occupational safety, employee health, and gives relevant information. The course, contributes high level with substance 4,-10 and 12, highest level with substance 1-5. and 11. contributes of learning outcomes | | | | | |
| Assessment System | | Number | | Contribution (%) | | | |
| Assignments | | 0 | | 0 | | | |
| Presentation | | 0 | | 0 | | | |
| Mid-term Examinations (including time for preparation) | | 1 | | 80 | | | |
| Project | | 0 | | 0 | | | |
| Clinical Practice | | 0 | | 0 | | | |
| Laboratory | | 0 | | 0 | | | |
| Field Work | | 0 | | 0 | | | |
| Other Applications | | 0 | | 0 | | | |
| Quiz | | 0 | | 0 | | | |
| Term Paper/ Project | | 1 | | 20 | | | |
| Portfolio Study | | 0 | | 0 | | | |
| Reports | | 0 | | 0 | | | |
| Learning Diary | | 0 | | 0 | | | |

| | | |
|--|---|-----|
| Thesis/ Project | 0 | 0 |
| Seminar | 0 | 0 |
| Other | 0 | 0 |
| Final Exam | 0 | 0 |
| Total | 2 | 100 |
| The Weight of the In-Term Assignments in the Final Grade | 2 | 100 |
| The Weight of the End of Term Exam in the Final Grade | 0 | 0 |
| Total | 2 | 100 |

Continuous Improvement in the Context of the courses (questionnaires, interviews, and so on.) Front Shown Measurement and Evaluation Tools and Objectives :

The survey is at the end of the year abroad, the international equivalent of courses taken, the students have a talk with the public and the private sector and information obtained by a call in basis, and the lesson with examples of current issues and international to be equivalent to the work is used.

ECTS

| Activities | Number | Time | Credit Workload |
|--|--------|------|-----------------|
| Class Hours | 28 | 2 | 56 |
| Working Hours out of Class | 14 | 1 | 14 |
| Assignments | 0 | 0 | 0 |
| Presentation | 0 | 0 | 0 |
| Mid-term Examinations (including time for preparation) | 6 | 1 | 6 |
| Project | 0 | 0 | 0 |
| Clinical Practice | 0 | 0 | 0 |
| Laboratory | 0 | 0 | 0 |
| Field Work | 1 | 4 | 4 |
| Other Applications | 0 | 0 | 0 |
| Final Examinations (including preparatory year) | 6 | 1 | 6 |
| Quiz | 0 | 0 | 0 |
| Term Paper/ Project | 11 | 1 | 11 |
| Portfolio Study | 0 | 0 | 0 |
| Reports | 2 | 4 | 8 |
| Learning Diary | 0 | 0 | 0 |
| Thesis/ Project | 0 | 0 | 0 |
| Seminar | 0 | 0 | 0 |
| Other | 0 | 0 | 0 |
| Total Workload | | | 105 |
| Total Workload / 25 | | | 4,2 |
| ECTS Credit of Course | | | 4 |

Weekly Course Contents

| Week | Theoretical Topics |
|------|--|
| 1 | Principles of forest road network planning |
| 2 | Forest road networks design |
| 3 | Regulation of forest road construction project |
| 4 | Cost analysis of road construction |
| 5 | Forest road planning with digital terrain model |
| 6 | Occupational knowledge and occupational safety in forest road construction |
| 7 | Occupational knowledge and occupational safety in forest road construction |
| 8 | Forest road construction with machine |
| 9 | Forest road construction with machine |
| 10 | Soil engineering |
| 11 | Forest road structures (Walls) |
| 12 | Forest road structures (Drainage) |
| 13 | Forest road structures (Drainage) |

| 14 | Maintenance and repair of forest road and bridges |
|------|--|
| Week | Practice Topics |
| 1 | Introduction to forest road planning |
| 2 | Mean slope, finding compass aparture, drawing zero road line |
| 3 | Project control |
| 4 | Straightening, horizontal curves, metering |
| 5 | Preparing of road longitudinally cross-section |
| 6 | Preparing of road longitudinal cross-section |
| 7 | Red elevations, gateway node, vertical curves |
| 8 | Project control |
| 9 | Project control |
| 10 | Transversally cross-section of road and road cost |
| 11 | Project control |
| 12 | Project control |
| 13 | Preparing technical report of forest road |
| 14 | Submission project |

Relationship of Proficiency Program with Course Learning Outcomes

| No | Program Competencies | Point |
|--|--|-------|
| 1 | Adequate knowledge in mathematics, science and forest engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied information in these areas to model and solve engineering problems. | 5 |
| 2 | Ability to identify, formulate, and solve complex problems in forest engineering; ability to select and apply proper analysis and modeling methods for this purpose. | 4 |
| 3 | Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose. | 4 |
| 4 | Ability to devise, select, and use modern techniques and tools needed for engineering practice; ability to employ information technologies effectively. | 4 |
| 5 | Ability to design and conduct experiments, gather data, analyze and interpret results for investigating engineering problems. | 4 |
| 6 | Ability to find knowledge and searching reference for this purpose, Ability to use databases and other references. | 4 |
| 7 | Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually. | 4 |
| 8 | Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language. | 1 |
| 9 | Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself. | 3 |
| 10 | Awareness of professional and ethical responsibility. | 4 |
| 11 | Information about business life practices such as project management, risk management, and change management; awareness of entrepreneurship, innovation, and sustainable development. | 5 |
| 12 | Knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety; awareness of the legal consequences of engineering solutions. | 5 |
| <i>Contribution Level: 1 low, 5 high.</i> | | |
| Contribution of Learning Outcomes on Program Competency : | The course enhances the ability to use theoretical and practical forest engineers, contribute to solving current and future problems, to impart the ability to select and use modern techniques and tools, office applications, occupational safety, employee health, and gives relevant information. The course, contributes high level with substance 4,-10 and 12, highest level with substance 1-5. and 11. contributes of learning outcomes | |

Last updated on : 15.08.2013