

Course number and name	END 314 / Service Systems
Credits, contact hours, categorization of credits	3 credits / 42 hours / Engineering topic
Instructor or course coordinator	Cemil CEYLAN
Text book and other supplemental materials	<ul style="list-style-type: none"> • Grönass, C. (1990); <i>Service Management and Marketing</i>, Maxwell-Macmillan • Murdick, R. (1990); <i>Service Operation Management</i>, Allyn and Bacon • Öztürk, S.A. (1998); <i>Hizmet Planlaması</i>, AÜ • Hope, C. (1997); <i>Service Operations Management</i>, Prentice Hall • Glyn, W.J., Barnes, J.G. (1995); <i>Understanding Services Management</i>, Wiley

Course information	
Content	To describe qualifications of service systems, structure of service systems and problems of service systems.
Prerequisites	None
Type	Selected elective

Course learning outcomes
<p>Students who pass the course will:</p> <ol style="list-style-type: none"> I. Learn main terms and concepts of service systems II. Understand customer contact III. Prepare service presentation plan IV. Measure potential operating efficiency and analyze problems V. Learn service guarantee and quality VI. Implement demand, capacity and customer management VII. Make mapping analysis

Student outcomes	Level of contribution
SO1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.	Partial
SO2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.	Not applicable
SO3. An ability to communicate effectively with a range of audiences.	Not applicable
SO4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	High
SO5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	Partial
SO6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	High
SO7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	Partial

Week	Topics	Learning outcome(s)
1	Introduction of the course	I
2	Basic concepts of service systems	I
3	Common characteristics and distinctive properties of service systems	I
4	Definition, analysis and design of service systems	II, III, IV, V
5	Definition and measurement of customer contact: service blue print	II, III, IV, V
6	Service presentation plan	III
7	Potential operating efficiency and problem analysis	II, III, IV, V
8	Service guarantee	V
9	Service quality	II, III, IV, V
10	Demand management	VI
11	Capacity management and customer management	VI
12	Mapping analysis	VII
13	Coupling analysis	VII
14	General Evaluation	I, II, III, IV, V, VI, VII