- Spring and other J2EE containers
- Application Servers
- Enterprise Service Bus and Mule
- Model View Controllers and Struts
- Java Server Faces

LEARNING AND TEACHING APPROACHES:

- The subject will use a workshop format with code examples discussed during a one hour lecture period
- Practical sessions will be held to review the theory discussed in the lecture from a practical point of view
- Assessment items will have two parts: the first part part will specify the minimum knowledge required to pass the subject, and the second part will include challenge questions to push a student's boundaries.

LEARNING RESOURCES REQUIRED:

Lecture notes, online tutorials, conference proceedings, journals, websites.

LEARNING RESOURCES RECOMMENDED:

1. Brian Goetz, 2006. *Java Concurrency in Practice*. 1 Edition. Addison-Wesley Professional.
2. Elliotte Rusty Harold, 2004. *Java Network Programming, Third Edition*. Third Edition. O'Reilly Media.
3. Jan Graba, 2006. *An Introduction to Network Programming with Java*. 2nd Edition. Springer.
4. Joshua Bloch, 2005. *Java™ Puzzlers: Traps, Pitfalls, and Corner Cases*. Edition. Addison-Wesley Professional.
5. Kenneth L. Calvert, 2008. *TCP/IP Sockets in Java Bundle: TCP/IP Sockets in Java, Second Edition: Practical Guide for Programmers (The Practical Guides)*. 2 Edition. Morgan Kaufmann.
6. Merlin Hughes, 1999. *Java Network Programming, 2nd Edition*. 2nd Edition. Manning Publications.