



**PROGRAMS AND BIBLIOGRAPHY**

<b>Subject</b>	
<b>Code</b>	<b>Name</b>
Q0551	Biochemistry I

<b>Vector</b>
OF:S-5 T:004 P:000 L:000 O:000 D:000 HS:004 SL:004 C:004 AV:N EX:S FM:75%

Pre requirement	Q0321
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<b>Summary</b>
Introduction, amino acids, proteins: structure, methods for protein analysis, protein function, carbohydrates, nucleic acids, RNA and DNA structures, methods for analysis of nucleic acids, principle of recombinant DNA technology, lipids and biological membranes, membrane transport, enzymology, selected topics.

<b>Program</b>
<ul style="list-style-type: none"><li>▪ Introduction</li><li>▪ Amino Acids</li><li>▪ Proteins: Structure</li><li>▪ Methods for Protein Analysis</li><li>▪ Protein Function</li><li>▪ Carbohydrates</li><li>▪ Nucleic Acids, RNA and DNA Structure</li><li>▪ Methods for Analysis of Nucleic Acids</li><li>▪ Principle of Recombinant DNA Technology</li><li>▪ Lipides and Biological Membranes</li><li>▪ Membranes Transport</li><li>▪ Enzymology</li><li>▪ Selected Topics</li></ul>

<b>Bibliography</b>
Nelson, D.; Cox, M.; <i>Lehninger Principles of Biochemistry</i> , 4 <sup>th</sup> Ed., Freeman, 2005. Berg, J.; Tymoczko, J.; Stryer, L.; <i>Biochemistry</i> , 6 <sup>th</sup> Ed., Freeman, 2006. Voet, D.; Voet, J.; Pratt, C.; <i>Fundamentals of Biochemistry</i> , Artmed, 2000. Lodish, H.; <i>et al.</i> ; <i>Molecular Cell Biology</i> CD-ROM, 3 <sup>rd</sup> Ed., Freeman, 1996. Wade, L.G., Jr.; <i>Organic Chemistry</i> , 6th Ed., Prentice Hall, 2006.

<b>Evaluation criteria</b>
For grading policy, see: Regimento Geral de Graduação, Seção I – Normas Gerais, Capítulo V – Da Avaliação do Aluno na Disciplina. Students are required to attend 75 % of the lectures. For further details, see: Regimento Geral de Graduação, capítulo VI, seção X, artigo 72.