

<b>Course Code</b>	<b>Basic Calculus</b> UNYP 64245
<b>Level</b>	Lower-level course in a Bachelor's degree program
<b>Credits</b>	4 semester credits / 8 ECTS
<b>Pre-requisite(s)</b>	C- or better in College Algebra, or sufficient score on mathematics placement test
<b>Scheduled meetings</b>	60 hours
<b>Average preparation time</b>	140 hours
<b>Total student work time</b>	200 hours
<b>Description</b>	The course consists of a survey of calculus that is useful to students of business, information science, and the social and biological sciences. Differentiation and integration of polynomial, rational, exponential and logarithmic functions. Emphasis on techniques and applications, chosen from such fields as economics, psychology, and biology.
<b>Learning outcomes</b>	Upon successfully completing this course, the student will be able to: <ul style="list-style-type: none"> <li>• understand the theoretical concepts like limit, continuity, derivative, etc.;</li> <li>• use in an adequate way various differentiation techniques;</li> <li>• apply the theory of differentiation to graph sketching;</li> <li>• solve maximum-minimum problems;</li> <li>• work with exponential and logarithmic functions and be informed about their rich applications;</li> <li>• apply integration to find areas in the coordinate plane.</li> </ul>
<b>Study literature</b>	Calculus and its Applications. Bittinger, M.L., Ellenbogen, D.J. Pearson International Edition. Year: 1995 (Edition 6)  Additional readings available on UNYP E-Learn or in the UNYP Library.

All courses are taught in English, with the exception of language courses. UNYP's 3-year and 4-year Bachelor's programs are accredited by the Czech Accreditation Commission, a part of the Czech Ministry of Education, Youth and Sports, and lead to the award of a *bakalář* (Bachelor's) degree. UNYP's 3-year Bachelor's of Business degree is also accredited by the the U.S.-based International Assembly for Collegiate Business Education (IACBE), a CHEA-recognized accreditor.