are integrable sets. Also the integral μ extends naturally to $L^1(\mu)$ and thus yields a measure on the integrable sets. This leads to a full discussion of the Lebesgue convergence theorems and Fubini's theorem, which complete Chapter 5.

In addition to the material discussed above, Bridges gives a fairly general version of the Stone-Weierstrass theorem in Chapter 4 and treats the functional calculus for bounded, selfadjoint operators on Hilbert space in Chapter 6. He also gives an extensive list of references which will be useful to anyone who wishes to see what a wide variety of constructive mathematics, and not just in analysis, has been developed since the appearance of Bishop's book.

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Discontinuous Čebyšev systems, by Roland Zielke, Lecture Notes in Math., vol. 707, Springer-Verlag, Berlin-Heidelberg-New York, 1979, vi + 111 pp., $9.00.

A finite set of real-valued functions $g_1, \ldots, g_n$ having a common domain is linearly independent if and only if there exists a set of points $x_1, \ldots, x_n$ for which the determinant $\det(g_i(x_j))$ is nonzero. On the other hand, if this determinant is nonzero for *all* choices of distinct points $x_1, \ldots, x_n$, then the functions are said to comprise a *generalized Tchebycheff system* (GTS). Equivalently, one says that each nontrivial linear combination of the functions can have at most $n - 1$ zeros. Thus the concept of a GTS arises naturally by abstracting one important property of the monomial functions $1, x, x^2, \ldots, x^{n-1}$.

In approximation theory, the GTS emerges as a suitable mechanism for interpolation and approximation with various norms. For example, a polynomial of degree at most $n - 1$ can always be found taking prescribed values at n distinct points. But the same is true for the linear combinations of any GTS of order n, and indeed this property too could have served as the definition. Somewhat more recondite is the theorem of Tchebycheff [1859]: Each continuous function f defined on a compact interval $[a, b]$ possesses a unique best uniform approximation by a polynomial of degree at most $n - 1$: i.e., a polynomial p such that the expression

$$\|f - p\| = \max_{a \leq x \leq b} |f(x) - p(x)|$$