the fruit of just such a course taught at Case Institute of Technology, there may be preferable alternatives open to the physicist or engineer preparing himself for a career of research. Perhaps the following remarks would apply more to the theoretician than the experimentalist, but the principle still persists.

Limits on the size of a book and the teaching time available during a two-semester course severely curtail the amount of material which can be encompassed. The end result of survey courses too often appears to be that when the physicist or engineer returns home from his brief sojourn in the land of applied mathematics he makes two discoveries: (a) when he really needs a mathematical implement it happens to be one he didn't bring home with him, and (b) many of the ones he brought back could have been bought more cheaply at home in the first place.

The goal then should be the development of a mathematical maturity to temper and complement one's physical intuition, rather than the acquisition of a repertoire of a few mathematical *dei ex machinae*. It often becomes necessary to "roll your own" analysis, and the ability to do this can't be achieved by a crash program.

An alternative program might well include, beyond the bed-rock analysis, separate courses in complex function theory (statistical mechanics, plasma physics, field theory, fluid dynamics), real variables (for Lebesgue integration occurring in other contexts), linear spaces (field theory, quantum mechanics, elementary particle interactions), abstract algebra (transition probabilities, quantum mechanics, crystal lattices), and partial differential equations (all continuum mechanics).

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83[P, X].—R. D. STUART, *An Introduction to Fourier Analysis*, John Wiley & Sons, New York, 1962, 126 p., 19 cm. Price $3.00.

This book is written from the viewpoint of a physicist or communications engineer and, typically, it deals almost entirely with applications. The first and third chapters are supposed to provide the basic material in the theory of Fourier series and Fourier integrals, but the "proofs" are almost everywhere fallacious, even for continuous functions. The second and fourth chapters contain descriptions of the "usual" functions and their transforms, as, for example, the square wave, sawtooth, unit impulse, and exponential decay. Chapters V and VI treat applications to circuit analysis and wave motion, including filters, the capacitance-resistance circuit, bandwidth, diffraction, amplitude modulation, and phase modulation (in which the presumably immature reader is suddenly expected to know some Bessel function theory).

The book cannot be recommended for serious students of waveform analysis, and it is hard to see where its value does lie.

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84[P, X].—P. P. TEODORESCU, *Probleme Plane in Teoria Elasticitatii*, Vol. I, Editura Academiei Republicii Populare Romine, Romania, 1960, 995 p., 23 cm. Price Lei 42,80.

This book of just under 1000 pages is in Romanian. It is concerned only with