This material is designed to be used as is (alone) as well as in consultation with an advisor. It is possible that the information below captures the content of one of the most important courses of study many students could undertake. Too many students seem to put off seriously examining “where they will go from here” until certain avenues are no longer even reasonably available to them. The two Special Sections at the end address two areas in more detail: graduate education in human services and human factors applied science.

**Brief Tips and Comments**

► **Begin immediately.** It is never too early to begin preparing for one’s next step.

► **Individual student initiative.** “I received inadequate advising” says much about the student with such an opinion. The world’s best advising systems are worthless in the absence of student initiative. Students who actively seek information can overcome the worst advising systems.

► **Be analytic and questioning.** Keep your analytic skills active when you are presented with advice. If in doubt about something, ask questions.

► **Avoid absolutism.** Do not treat any bit of advice as always the best regardless of individuals, places, contexts, and other variations in conditions.

► **Don’t trust a small number of sources.** Every source has a unique history, thus is subject to unique biasing conditions—even when this possibility is recognized (which often is not the case).

► **Be careful of trivialities.** Take a broad perspective for the future. For example, someone who has always aspired to live in New Mexico probably is better off not to limit the first post-baccalaureate goal to a position in New Mexico. What are some different potential routes to being able to comfortably reside in that location?

► **Plan for alternatives.** One who sufficiently explores advising information from a variety of sources and carefully examines their own likes, dislikes, strengths, weaknesses, and other personal tendencies will discover that there will be more than one alternative route to their goal. An excellent example of this is discussed below in the case of those who seek to work in certain areas of applied psychology.
The remainder of this information bulletin divides up advising matters into three overlapping categories. The first section addresses what students might consider regarding their situation at EMU. The second deals with the often overlooked area referred to as knowing the discipline. The third section brings up post-baccalaureate decisions.

I. At EMU

► Requirements for the major (Psychology curriculum)
  ● See sheets with required courses, prerequisites, restricted electives, credit hours, and sequencing of courses
  ● Check at the Psychology Office as well as in its vicinity for important materials

► Minor
  ● Sociology is not generally recommended if you might be interested in graduate school, instead consider areas such as
  ● Math, biology, computer science, chemistry, physics, philosophy

► Mathematics
  ● If you “tested out of” math, this suggests your potential in math is well above others and that you are advised to take as much math as you can, contrary to what you might have been told elsewhere

► Course load
  ● The standard recommendation of enrolling in 15-16 credit hours per term is based on full-time devotion to academic work, otherwise:
  ● Cut back on course load; it is preferable to take longer than 4 years to obtain your degree than to not academically perform as well as you could

► Opportunities
  ● Gain respect (faculty tend to like and respect students who are assertive but respectful – don’t lose your cool!)
    -- How to not lose it? Put yourself in the position of a faculty member.
  ● Get to know faculty (may need recommendations, references, advice,…)
  ● Independent study in the form of Individual Readings and Research
    -- academic credit can be earned
    -- work with faculty on an individual basis
    -- develop a contract with supervisor
  ● Other outside-of-classroom experience such as research and service
  ● Psychology Club
  ● Psi Chi (national honorary in psychology)
  ● Undergraduate Psychology Advising Service
  ● University-wide organizations and activities

II. Knowing the Discipline

► The bachelor’s degree with a psychology major is a liberal arts degree
► Introductory psychology text books
► Web sites of universities and professions
► Web sites of organizations
Careers, e.g., see American Psychological Association (APA) Web site
Journals—see PsycINFO
Two main areas
- Providing services to the public, e.g.,
  - clinical psychology
  - applied behavior analysis
  - counseling
  - social work
  - industrial/organizational psychology
  - human factors
- Basic science, includes a variety of specializations, e.g.,
  - social
  - personality
  - learning
  - cognitive
  - developmental
  - behavioral neuroscience
  - cognitive-behavioral neuroscience
Academic psychology
- Faculty member at college or university
- Can specialize in any of the two main areas but requires doctorate and research interests and skills

III. Post-Baccalaureate Decisions (the more you know the discipline, the better prepared you will be for decisions here)

Don’t wait!! Start now
A bachelor’s degree in psychology prepares graduates to pursue:
- Master’s or doctoral study in psychology
- (in some cases with supplemental undergraduate work) Graduate or professional school in areas such as guidance, counseling, educational psychology, rehabilitation, social work, criminology, law, management, marketing, dentistry, medicine
- Employment in private or public sector, e.g., social work, personnel work, quality control, management training, marketing research, sales
- Example of a recent ad for an entry-level position for someone with a Psychology bachelor’s degree:

CASE MANAGER for [name and location of agency]. Work with at-risk & homeless teens. Bachelors in human service field … required.

The Web has much information on psychology jobs
See “What can you do with a BA in psychology?” by Aubrecht (2001)
- Available at www.psichi.org/pubs/articles/article_68.asp
Continue with education toward a higher degree in psychology or related area?
- No
  --see “What can you do with a BA in psychology?” and other resources
--or explore requirements for dentistry, medicine, psychiatry (requires a medical degree) and other areas not particularly closely related to psychology

● Yes (the following pertains to this answer)
  -- providing services to the public?
  -- basic science?
  -- academic position?

► Pertaining to all 3 (providing services to public, basic science, academic position)
  ● Wide variation in many variables over programs
  ● The most desired programs offer extensive financial support in the form of tuition, teaching and research assistantships, and fellowships
  ● Learn as much as you can about possible programs and faculty
  ● Read the literature and attend conferences in areas of interest
  ● Aspire to best possible graduate program
  ● Quality based on institution’s reputation, status of major professor, reputation of program, graduate student funding
  ● Where do new graduates go after completing the program? Potential major professors will often display this at their Web sites
  ● Can’t begin preparing for the GRE soon enough

► Providing services to the public

● This area offers the most leeway in terms of entry academic credentials and employment alternatives

● Not restricted to programs in departments of psychology

● Can locate outside of psychology departments, e.g., counseling, organizational behavior management, applied behavior analysis, social work (of course), rehabilitation counseling, health education

● Highest admission standards (generally): APA-accredited Ph.D. programs in psychology

● Ph.D. (Philosophiae Doctor or Doctor of Philosophy) vs. Psy.D. (Doctor of Psychology)
  -- two clinical psychology models of training
  -- see “Appreciating the PsyD: The Facts” by Norcross & Castle (2002, Eye on Psi Chi, Web search)
  -- in general, Ph.D. programs are more committed to science than are Psy.D. programs

● Check licensing requirements for positions for which the program you are exploring prepares graduates
  -- e.g., in Mich. and several U.S. states, clinical psychology has two levels of licensing, master’s and doctoral

● 2 clinical master’s programs at EMU’s Department of Psychology
  -- General Clinical: based on an understanding of clinical psychology that addresses personality and psychopathology within the context of intra-and interpersonal processes that occur in a developmental context.
--Clinical Behavioral: based on clinical psychology as concerned with assessing and changing behavior.

►Basic science

● For those who enjoy research
● Very competitive because of nature of Ph.D.-level positions
● Math and often computer programming skills almost expected at the top programs
● Increasingly valued in applicants’ credentials is education in biology, math, computer science with little concern with psychology except for laboratory work experience
● Major in psychology is not required
● Perhaps a preferred major professor virtually decided on before you apply to a particular program
● Might distinguish two broad areas (but note that this categorization is rather superficial): (1) social-personality-developmental and (2) experimental cognitive (often with nonhuman or human neuroscience)
● The top graduates in all basic science areas tend to be very quantitative with sophisticated computer skills
● Your knowledge of the discipline will reveal many variations not obvious in the above categorization
● Does not necessarily dictate an academic position (see Web and other research)
● There are numerous interdisciplinary programs as you can discover with Web and other research

►Academic Positions

● Quite competitive for Ph.D.-level positions but there is a range of institutions
● The most prestigious doctoral programs, usually with a post-doc, will eventuate in the most alternatives
● Have to enjoy research

SPECIAL SECTION ON GRADUATE TRAINING IN HUMAN SERVICES

Many undergraduate psychology students aspire to positions in areas best described as counseling or clinical, in other words, working with people (children, adults, chemically dependent persons, families, and so on). In brief, they have interests in the provision of psychosocial services to the public. We have found that many such students assume that the credential they need to do such work is a doctoral degree (PhD or PsyD) in clinical psychology. As we will see below, this assumption is incorrect and extremely limiting.

Sometimes students are not clear on the similarities and differences over several specialties. For example, Psychiatry is a branch of medicine that requires graduation from
medical school with an MD or DO degree followed by a 4-year psychiatry residency. This profession requires the greatest number of post-baccalaureate years to qualify for licensing.

**Several important points:**

Licensing is usually, but not always, required for providing human services to the public. Although the practice of medicine is well-defined, fee-based activities referred to as “helping people,” mental health counseling, motivational consultation, and marriage ministry can be much more difficult to define. Although psychologists often seem to be hesitant to encourage non-credentialed psychologists to offer services to the public that are psychological-like, the fact is that psychosocial services are more difficult to define than those offered by many other professions. Students are advised to remain open to the possibility that their aspirations could be met outside of the purview of what academic, clinical, and counseling psychologists define as the practice of psychology.

An important source of information is found in state licensing laws. In Michigan, the following psychology-related professions fall under “Licensing for Health Care Professionals”: counseling, marriage and family therapy, psychology, social work, and speech and language pathology. The fact that these are in different categories indicates that they involve different credentials for licensing, i.e., different education and training programs. Students interested in providing psychosocial services to the public are strongly urged to examine licensing laws.

Distinguish between licensing and certification. In the United States, licenses are usually issued by state agencies, and they have legal status—states license. Licensing requires by law a demonstration of ability or knowledge. Certifications are usually earned from a professional society or educational institute, not the government. Certification and licensure may be quite similar in terms of the requirements, but differ greatly in terms of legal status.

There is a wide range of levels and classes of licensing that is evident from examination of licensing laws. As mentioned above, Michigan has two basic levels of licensing in psychology, one requiring a master’s degree, the other a doctoral degree. Yet, a local phone book reveals the following degrees or credentials for advertisers listed under psychologist: PhD, PsyD, MSW, ACSW, MA, and LLP. The listing for Counseling shows LMSW, MSW, CSW, ACSW, PhD, PsyD, BCD, PLLC, LPC, AMSW, DCSW, and LMFT. Moving on to the Social Workers listing one finds MSW, CSW, BCD, ACSW, DCSW, LMFT, LMSW, MA & MSW, and PLLC. Clearly, there is great diversity in training for those who are providing psychosocial services to the public. Also, note that social work is far more than case management or community organizing. Most social work programs offer training in individual and group therapy and counseling, including mental health services.

Some of the above is illustrated by a recent newspaper advertisement headed “THERAPIST.” The most important text read as follows:
**Full-time position as therapist for children & adolescents with serious emotional disturbances and their families.** Provide individual and family therapy in office, home and community settings, case management, collaborate with other providers. Master’s degree with LMSW, LLP, or LPC required.

Notice how three different disciplines (in three different colleges at EMU) are treated identically by this hiring agency. Academic preparation for State licensing as Licensed Master’s Social Worker, Limited Licensed Psychologist, and Licensed Professional Counselor can be attained in any of three different programs.

We see that one sort of master’s degree or another is generally recommended as the minimum preparation for employment as a therapist, counselor, or psychologist. The degree can be from any of three different programs. The same rule generally applies to the higher level of credential—the doctorate. However, social work continues to maintain the master’s degree as the terminal degree.

Finally, there seems to be a growing tendency for providers of psychosocial services to use the terminology *behavioral health* and *behavioral health care* instead of terms such as *mental health* and *clinical psychology*. However, few academic programs currently use the more recently evolved terminology as identifiers. When you are searching for information such as found in job listings and on the Web, you are advised to include the more recently evolved terms in your searches.

**SPECIAL SECTION ON HUMAN FACTORS**

Most undergraduate programs cannot cover much of what psychologists end up doing. This section illustrates how simply relying on general terms can be uninformative. To one “not in the know,” “human factors,” also called “ergonomics” is unlikely to convey just what is involved. It turns out that a more informative term for the specialty would be something like “applied human experimental psychology” (which was originally used). Basically, human factors science applies experimental and other psychological research methods, but especially experimental, to meet the mission of the Human Factors and Ergonomics Society (founded in 1957 with 23 technical groups) described as:

…to promote the discovery and exchange of knowledge concerning the characteristics of human beings that are applicable to the design of systems and devices of all kinds.

The Society furthers serious consideration of knowledge about the assignment of appropriate functions for humans and machines, whether people serve as operators, maintainers, or users in the system. And, it advocates systematic use of such knowledge to achieve compatibility in the design of interactive systems of
people, machines, and environments to ensure their effectiveness, safety, and ease of performance.

Excerpts for a recent ad for a position in human factors read as follows:

SUPERVISORY ENGINEER--HUMAN FACTORS.
U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA)
The position (to manage a human factors program to improve automotive safety) serves as NHTSA’s primary source of technical expertise and leadership for planning, organizing, directing, and executing human factors research. The research program includes a wide variety of topics, including preventing crashes caused by driver distraction, improving driver safety through advanced driver assistance technologies, and on enhancing driver safety by optimizing the driver-vehicle interface design of in-vehicle systems.

More broadly, human factors specialists work on the design of equipment, tasks (such as in manufacturing), and environments (lighting, noise, temperature, distances between components) and on selecting and training individuals. Human factors researchers often work with basic science problems as they relate to actual or potential real-life activities. Behavioral, cognitive, social, biological, and biomechanical principles are within the boundaries of human factors.