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To Offer the SEBS Horticultural Therapy Minor to Undergraduates at the School of Arts and Sciences

School of Environmental and Biological Sciences (SEBS)

Department of Plant Biology:

Horticultural Therapy Instructor – Gary Altman

Horticultural Therapy Program Administrator –Dr. Nrupali Patel

Undergraduate Program Director – Dr. Ann Gould

Horticultural Therapy Minor

1. Program description:

Horticultural Therapy (HT) is an emerging profession that uses the cultivation of plants as atherapeutic modality in a broad range of rehabilitative, vocational, and community settings. HT techniques are employed to assist participants to learn new skills or regain those that are lost, improve memory, cognitive abilities, task initiation, language skills, and socialization. HT has a range of applications, and can be used effectively with persons that have physical, psychiatric, developmental disabilities, or are victims of abuse, as well as, rehabilitation of abusers. The intervention is applicable to individuals no matter what point in life span they are in, whether they are recovering from illness or adjusting to disability, and whether or not the individual has experience in gardening.

The American Horticultural Therapy Association (AHTA)¹ is the governing body that recognizes and registers horticultural therapists through a voluntary professional registration program. The designation Horticultural Therapist-Registered (HTR) ensures that professional competencies have been achieved based on standardized academic requirements and professional training. The educational requirements for professional AHTA registration² include completion of at least 33 course credits in three areas: Horticultural Therapy (9 cr), Human Sciences (12 cr), and Horticultural Sciences (12 cr). SEBS Department of Plant Biology offers a certificate program in HT (Appendix I) that is designed to completely satisfy the educational requirements for professional registration. The HT Certificate program has been continuously accredited by the AHTA since 2009 and is one of the leading Horticultural Therapy programs in the United States. The HT Certificate attracts primarily nonmatriculated students seeking career change or advancement. The HT Certificate also attracts matriculated SEBS undergraduates; however, because it is credit intensive, the HT Certificate is less attractive to undergraduates interested in exploring HT as a career option. For this reason, the Department of Plant Biology recently obtained SEBS approval to offer a Minor in HT. The HT Minor has 18 credits of required courses, and positions students to complete the HT Certificate and receive AHTA registration, if they so choose, post-graduation. The HT Minor was designed to make it easier for undergraduates to explore HT as a career option.

HT draws heavily upon the social sciences, and in particular, psychology. Thus, the HT Minor could offer Psychology Majors the ability to expand on their undergraduate training and provide a career enhancement opportunity. We envision that both undergraduate Psychology Majors as well as graduate students in the Social Work Program would find HT to be an opportunity to utilize their training to engage clients in group or individual therapy to enhance social functioning using HT as the modality by which interventions are delivered. The opportunity to combine the psychology and social work skills set with the HT skills set can prepare graduates for the use of HT in various settings, such as rehabilitation centers, vocational training programs, schools, residential facilities, and correctional facilities. Hence, the HT Minor may be of interest to SAS students particularly those who are majoring in the social science disciplines.

In order to align the HT minor program with social science disciplines, we met (summer 2018) with two faculty members in the Department of Psychology (Dr. Karin Stromswold, Undergraduate Vice Chair; and Dr. David Wilder, Director of Undergraduate Advising) to discuss and review the proposed

¹ https://www.ahta.org/

² https://www.ahta.org/professional-registration

HT Minor. They made recommendations for modifications to the psychology course requirements including addition of Abnormal Psychology as a required course and several relevant psychology electives.

The Minor in Horticultural Therapy is 18 credits with the addition of a pre-requisite course in General Psychology. Students who choose to complete the proposed Minor will satisfy the three core Horticultural Therapy courses (9 cr total: Introduction to Horticultural Therapy, Horticultural Therapy Techniques and Programming, and People-Plant Relationships); one 3 cr Horticultural Science elective offered by the Plant Science undergraduate Major; and two Human Sciences courses (the prerequisite General Psychology and Abnormal Psychology) offered by the Psychology undergraduate Major. The HT Minor does not satisfy all educational coursework required for professional registration. However, we believe that students who pursue this proposed HT Minor would broaden their knowledge of the field and the profession of HT. Furthermore, students would have the option of completing the remaining 15 credits of coursework (three additional Horticultural Science courses (9 cr) and two additional Human Science courses (6 cr) required for professional registration if they wish to pursue a career in Horticultural Therapy.

Course details of the minor are as follows:

Horticultural Therapy Minor

Credits: 18 credits

Prerequisites:

01:830:101 General Psychology* (3 cr)

REQUIRED COURSES (12 cr):

11:776:225	Introduction to Horticultural Therapy* (3 cr)
11:776:325	Horticultural Therapy Techniques and Programming* (3 cr)
11:776:432	People-Plant Relationships* (3 cr)

01:830:340 Abnormal Psychology* (3cr)

ELECTIVES (6 cr):

Horticulture electives (choose one from the list below):

11:776:211	Introduction to Horticulti	ıre* ((3 cr))

11:776:310 Plant Propagation* (3 cr)

11:776:391 Diseases and Insects of Plants OR 11:370:350 Agricultural Entomology and Pest Management* (3 cr)

11:776:439 Nursery Crop Production (3 cr)

11:776:302 General Plant Pathology (3 cr)

Human Science electives (choose one from the list below):

01:830:346	Atypical Development of Childhood and Adolescence (3cr)
01:830:310	Neuropsychology (3cr)
01:830:377	Health Psychology (3cr)
01:830:271	Principles of Developmental Psychology (human lifespan development) * (3 cr)
01:830:335	Adult Development and Aging (3 cr)
01:830:333	Adolescent Development (3cr)

^{*}Required courses in the Rutgers SEBS Horticultural Therapy Certificate Program (34-35 credits), which is accredited by the American Horticultural Therapy Association (AHTA).

2. Department of Plant Biology (SEBS) has expertise in Horticultural Therapy:

In 2009, the Rutgers HT-specialized courses (Introduction to Horticultural Therapy, Horticultural Therapy Program and Techniques, and People-Plant Relationships) received accreditation from AHTA. The Rutgers program renewed its accreditation in 2013 for a 5-year period (2014-2019). Accreditation streamlines the process for professional registration as a Horticultural Therapist (HTR). Obtaining professional registration is necessary for practicing HT as a vocation, or for Psychologists and Social Workers interested in using HT as a therapeutic modality

The specialized HT courses are taught by Mr. Gary Altman who has an MS degree in Rehabilitation Counseling – Clinical Mental Health Counseling and is a Certified Rehabilitation Counselor and registered Horticultural Therapist. Professor Joel Flagler, who established the Horticultural Therapy Program in the Department of Plant Biology is also a registered Horticultural Therapist. He co-edited the leading text book in the field "People -Plant Relationships – Setting Research Priorities" and developed all the HT-specialized courses. Both Mr. Altman and Prof. Flagler continue to align the courses with AHTA educational requirements and learning goals.

Courses fulfilling horticultural sciences requirements have been taught for over 10 years by professors in the Department of Plant Biology at Rutgers University since the founding of the HT Certificate program. Courses in the human sciences are taught by faculty in the Department of Psychology at Rutgers University.

Students who enroll in the HT minor would be advised by Dr. Nrupali Patel, who is the HT Program Administrator in the Department of Plant Biology.

3. Student Learning Outcome Goals:

After completion of the SEBS HT minor program, students will be able to:

- 1. Explain the therapeutic relationship between plants and individuals with disabilities in relation to specific rehabilitation goals.
- 2. Demonstrate basic communication skills (i.e. attending skills, responding to content, feeling, meaning & paraphrasing) essential to setting goals, and evaluating progress towards those goals with individuals with disabilities in the Horticultural Therapy profession.
- 3. Describe common functional limitations and implications of various developmental, psychiatric, sensory impairment, and medical conditions in relation to horticultural therapy work
- 4. Develop and implement horticultural therapy programming at a variety of healthcare, rehabilitative, and residential settings.

4. Learning Goals Assessment Plan:

Student learning goal outcomes are evaluated using a variety of different metrics as part of the student's successful completion of the specific HT or Horticultural Science course. To assess student knowledge of all course learning goals, specific questions on exams, in-class participation, and/or performance on student presentations will be used as per the course instructor.

Learning Goal 1: Explain the therapeutic relationship between plants and individuals in relation to specific rehabilitation goals

HT Courses assessments:

11:776:225	Introduction to Horticultural Therapy
11:776:432	People-Plant Relationships
11:776:325	Horticultural Therapy Techniques and Programming

Learning Goal 2: Demonstrate basic communication skills essential to successful work in the Horticultural Therapy profession

HT Course assessments:

11:776:225	Introduction to Horticultural Therapy
11:776:325	Horticultural Therapy Techniques and Programming

Learning Goal 3: Describe functional limitations and implications of various developmental, psychiatric, and medical conditions in relation to horticultural therapy work

HT Course assessments:

11:776:325	Horticultural Therapy Techniques and Programming
11:830:340	Abnormal Psychology

Learning Goal 4: Develop and implement horticultural therapy programming at a variety of healthcare, rehabilitative, and residential settings.

HT Course assessments:

11:776:225	Introduction to Horticultural Therapy
11:776:325	Horticultural Therapy Techniques and Programming

Appendix 1: AHTA approved Horticultural Therapy Courses for Professional Registration (HTR)

Horticultural Therapy Certificate Program Curriculum at Rutgers University (34-35 credits):

REQUIRED COURSES:

Group I: Horticultural Therapy Course REQUIREMENTS (9 cr):

- 11:776:225 Introduction to Horticultural Therapy (3 cr)**
- 11:776:325 Horticultural Therapy Techniques and Programming (3 cr)**
- 11:776:432 People/Plant Relationships (3 cr)**

GROUP II: Human Science course REQUIREMENTS (9 cr):

- 01:830:101 General Psychology (3 cr) **
 01:830:340 Abnormal Psychology (3cr)**
- 01:830:271 Principles of Developmental Psychology (Human lifespan development) (3 cr)

Group II: Horticulture courses REQUIREMENTS (9 cr)

- 11:776:211 Introduction to Horticulture (3 cr)*
- 11:776:310 Plant Propagation (3 cr) *
- 11:776:391 Diseases and Insects of Plants (3 cr); or 11:350:370 Ag Entomology and Pest

Management (Disease and Pest Management)*

ELECTIVES:

GROUP II ELECTIVE (CHOOSE ONE FROM THE LIST BELOW):

- 01:830:371 Group Dynamics (3 cr)
- 01:830:335 Adult Development and Aging (3 cr)*

GROUP III ELECTIVE (CHOOSE ONE FROM THE LIST BELOW):

- 11:776:302 General Plant Pathology (3 cr)*
- 11:776:321 Greenhouse Systems Management (3 cr)
- 11:776:439 Nursery Crop Production (3 cr)*
- 11:550:233 Landscape Plants I: Evergreens & Deciduous Plants (Plant Materials) (3 cr)
- 11:550:234 Landscape Plants 2: Plant Communities and Design (Plant Materials) (3 cr)
- 11:550:235 Herbaceous Plants in the Landscape (Plant Materials) (3 cr)
- 11:550:340 Planting Design (Landscape Design) (4 cr)

INTERNSHIP:

11:776:495/49 6 Special Problems in Plant Science (1 cr)

- ** Required courses in proposed HT minor to SAS students.
- * Elective options in the proposed HT minor