

## **OCCUPATIONAL THERAPY ASSISTANT**

### **OTA 110 Introduction to Occupational Therapy (3)**

*3 hours lecture per week*

*Comment: Letter grade only. OTA 110 may not be audited. OTA 110 may not be taken credit/no credit.*

OTA 110 is an introduction to the profession of Occupational Therapy. The course provides an overview of the history, philosophy, and role of Occupational Therapy in the health care environment. Discussion will involve current issues relating to the field, the framework of Occupational Therapy practice and process including practice settings and intervention approaches. The course describes the educational requirements and roles of Occupational Therapy practitioners as well as legal and ethical issues affecting practice.

Upon successful completion of OTA 110, the student should be able to:

1. Articulate an understanding of the importance of the history and philosophical base of the profession of occupational therapy.
2. Explain the role of occupation in the promotion of health and the prevention of disease and disability for the individual, family, and society.
3. Identify interventions consistent with models of occupational performance.
4. Describe basic features of the theories that underlie the practice of occupational therapy.
5. Describe basic features of models of practice and frames of reference that are used in occupational therapy.
6. Articulate the role of the occupational therapy assistant and occupational therapist in the screening and evaluation process along with the importance of and rationale for supervision and collaborative work between the occupational therapy assistant and occupational therapist in that process.
7. Identify and explain the need for supervisory roles, responsibilities, and collaborative professional relationships between the occupational therapist and the occupational therapy assistant.

### **OTA 111 Foundations of Occupational Therapy Practice (2)**

*4 hours lecture/lab per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL100; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141 **and** PHYL 141L **and** PHYL 142 **and** PHYL 142L **and** a grade of "C" or higher in HLTH 290 **and** HLTH 290L*

*Recommended Preparation: A grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 110.*

*Comment: Letter grade only. OTA 111 may not be audited. OTA 111 may not be taken credit/no credit.*

OTA 111 examines the meaning of occupation and activity through the use of the Occupational Therapy Practice Framework and applies relevant terminology to activity analysis. Commonly utilized activities and creative media will be analyzed, demonstrated, and fabricated, including techniques for adapting and grading. Methods of instruction in the use of therapeutic activities for intervention will be practiced. Students will create a portfolio that will be continued throughout their OTA program documenting learning and growth in the profession.

Upon successful completion of OTA 111, the student should be able to:

1. Describe the meaning and dynamics of occupation and activity, including the interaction of areas of occupation, performance skills, performance patterns, activity demands, context(s) and environments, and client factors.
2. Demonstrate task analysis in areas of occupation, performance skills, performance patterns, activity demands, context(s) and environments, and client factors to implement the intervention plan.
3. Provide therapeutic use of occupation, exercises, and activities (e.g., occupation-based intervention, purposeful activity, preparatory methods).
4. Grade and adapt the environment, tools, materials, occupations, and interventions to reflect the changing needs of the client and the sociocultural context.

### **OTA 112 Concepts for Pediatrics (3)**

*3 hours lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141 **and** PHYL 141L **and** PHYL 142 **and** PHYL 142L **and** a grade of "C" or higher in HLTH 290 **and** HLTH 290L **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 110.*

*Corequisite(s): OTA 112L **and** OTA 125 **and** OTA 126 **and** OTA 161 **and** OTA 161L.*

*Recommended Preparation: A grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240.*

*Comment: Letter grade only. OTA 112 may not be audited. OTA 112 may not be taken credit/no credit.*

OTA 112 examines the major sensorimotor, cognitive, neuromotor, and psychosocial components of normal development from childhood to early adulthood from an occupational therapy perspective. The etiology and clinical features of common infant and childhood diseases and disorders are discussed. Students are introduced to common occupational therapy assessments and treatment approaches used to evaluate the development of infants and children. Clinical decision-making and treatment in a variety of therapeutic settings will be discussed in addition to the collaborative work process between the occupational therapy assistant and occupational therapist.

Upon successful completion of OTA 112, the student should be able to:

1. Understand the effects of heritable diseases, genetic conditions, disability, trauma, and injury to the physical and mental health and occupational performance of the individual.
2. Identify when to recommend to the occupational therapist the need for referring clients for additional evaluation.
3. Provide development, remediation, and compensation for physical, mental, cognitive, perceptual, neuromuscular, behavioral skills, and sensory functions (e.g., vision, tactile, auditory, gustatory, olfactory, pain, temperature, pressure, vestibular, proprioception).
4. Recognize and communicate the need to refer to specialists (both internal and external to the profession) for consultation and intervention.
5. Understand when and how to use the consultative process with specific consumers or consumer groups as directed by an occupational therapist.
6. Describe the contexts of health care, education, community, and social systems as they relate to the practice of occupational therapy.

### **OTA 112L Pediatric Concepts Lab (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141 **and** PHYL 141L **and** PHYL 142 **and** PHYL 142L **and** a grade of "C" or higher in HLTH290 **and** HLTH 290L **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111.*

*Corequisite(s): OTA 112 **and** OTA 125 **and** OTA 126 **and** OTA 161 **and** OTA 161L.*

*Recommended Preparation: A grade of "C" or higher in FAMR 230 **or** PSY 240.*

*Comment: Letter grade only. OTA 112L may not be audited. OTA 112L may not be taken credit/no credit.*

OTA 112L focuses on laboratory practice in those methods and techniques necessary to deliver occupational therapy services to pediatric populations. Positioning and handling, gross motor and fine motor skills development, feeding and sensory integration treatment techniques will be emphasized. Student will be introduced to administering various assessment tools, client management techniques and occupational therapy interventions addressing areas of occupational performance, performance skills, performance patterns, activity demands, context(s) and client factors. Documentation methods utilized in occupational therapy settings will also be stressed.

Upon successful completion of OTA 112L, the student should be able to:

1. Gather and share data for the purpose of screening and evaluation using methods including, but not limited to, specified screening tools; assessments; skilled observations; occupational histories; consultations with other professionals; and interviews with the client, family, and significant others.

2. Administer selected assessments using appropriate procedures and protocols (including standardized formats) and use occupation for the purpose of assessment.
3. Gather and share data for the purpose of evaluating client(s)' occupational performance in activities of daily living (ADLs), instrumental activities of daily living (IADLs), education, work, play, rest, sleep, leisure, and social participation.
4. Enable feeding and eating performance (including the process of bringing food or fluids from the plate or cup to the mouth, the ability to keep and manipulate food or fluid in the mouth, and the initiation of swallowing) and train others in precautions and techniques while considering client and contextual factors.
5. Under the direction of an administrator, manager, or occupational therapist, collect, organize, and report on data for evaluation of client outcomes.

### **OTA 125 Fieldwork Level I: Activity and Mental Health (2)**

*A total of 100 clinical hours per semester*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 or ESL 100; **and** a grade of "C" or higher in MATH 100 or higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/ 142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111.*

*Corequisite(s): OTA 112 **and** OTA 112L **and** OTA 126 **and** OTA 161 **and** OTA 161L.*

*Comment: Letter grade only. OTA 125 may not be audited. OTA 125 may not be taken credit/no credit. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required. Weekly practicum hours may vary to accommodate students, faculty, and health professionals.*

OTA 125 is practical experience with patients/clients under the supervision of occupational therapy personnel or related professionals in which students apply knowledge gained in OTA courses. Settings include inpatient, outpatient, home/community based programs and emerging areas of practice that focus on patients/clients in activities or mental health settings. Students will observe and participate in specific tasks appropriate to their level of skills training and in accordance with on-site objectives.

Upon successful completion of OTA 125, the student should be able to:

1. Use sound judgment in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
2. Effectively interact through written, oral, and nonverbal communication with the client, family, significant others, colleagues, other health providers, and the public in a professionally acceptable manner.

3. Effectively communicate and work interprofessionally with those who provide services to individuals and groups in order to clarify each member's responsibility in executing an intervention plan.

### **OTA 126 Critique: Fieldwork Level I/Activity and Mental Health (1)**

*1 hour lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/ 142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in HLTH 125.*

*Corequisite(s): OTA 112 **and** OTA 112L **and** OTA 161 **and** OTA 161L **and** OTA 125.*

*Comment: Letter grade only. OTA 126 may not be audited. OTA 126 may not be taken credit/no credit.*

OTA 126 is a discussion of student experiences in Fieldwork Level I with emphasis on problem solving, identifying ethical issues, sharing professional knowledge and insights. OTA 126 will provide an opportunity for the instructor to give feedback to students about various fieldwork situations. Students will also begin to examine and practice documentation methods for reporting Occupational Therapy services.

Upon successful completion of OTA 126, the student should be able to:

1. Use sound judgment in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
2. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services, adhering to the requirements of applicable facility, local, state, federal, and reimbursement agencies. Documentation must effectively communicate the need and rationale for occupational therapy services.
3. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services. Documentation must effectively communicate the need and rationale for occupational therapy services and must be appropriate to the context in which the service is delivered.
4. Describe the ongoing professional responsibility for providing fieldwork education and the criteria for becoming a fieldwork educator.
5. Identify professional responsibilities related to liability issues under current models of service provision.
6. Identify personal and professional abilities and competencies as they relate to job responsibilities.

### **OTA 161 Mental Health Concepts (3)**

*3 hours lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111 **and** HLTH 125 with a grade of "C" or higher; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240.*

*Corequisite(s): OTA 161L **and** OTA125 **and** OTA 126 **and** OTA 112 **and** OTA 112L.*

*Comment: Letter grade only. OTA 161 may not be audited. OTA 161 may not be taken credit/no credit.*

OTA 161 focuses on Occupational Therapy practice relating to mental health. History, practice models and terminology used by Occupational Therapy practitioners in mental health settings will be explored. The Occupational Therapy process will be applied utilizing case studies and focus on occupational performance. Students will become familiar with concepts of group facilitation and styles of documentation. Professional literature review will focus on evidence based Occupational Therapy practice.

Upon successful completion of OTA 161, the student should be able to:

1. Demonstrate knowledge and understanding of the concepts of human behavior to include the behavioral and social sciences (e.g., principles of psychology, sociology, abnormal psychology) and occupational science.
2. Discuss how occupational therapy history, occupational therapy theory, and the sociopolitical climate influence practice.
3. Assist with the development of occupation-based intervention plans and strategies (including goals and methods to achieve them) on the basis of the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others.
4. Describe the contexts of health care, education, community, and social systems as they relate to the practice of occupational therapy.

### **OTA 161L Mental Health Concepts Laboratory (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in HLTH 125.*

*Corequisite(s): OTA 161 **and** OTA 125 **and** OTA 126 **and** OTA 112 **and** OTA 112L.*

*Comment: Letter grade only. OTA 161L may not be audited. OTA 161L may not be taken credit/no credit.*

OTA 161L provides laboratory practice for those methods and techniques necessary to deliver Occupational Therapy services for mental health populations. Students will explore common mental health conditions utilizing a research protocol and apply the teaching-learning process with peers. Gathering and sharing data for the purpose of administering selected assessments will be practiced. Students will demonstrate Occupational Therapy treatment planning and interventions addressing areas of occupational performance in activities of daily living (ADL), instrumental activities of daily living (IADL), education, work, play, leisure, and social participation to peers. Community resources will be explored and documentation methods utilized in Occupational Therapy settings will be practiced.

Upon successful completion of OTA 161L, the student should be able to:

1. Administer selected assessments using appropriate procedures and protocols (including standardized formats) and use occupation for the purpose of assessment.
2. Select and provide direct occupational therapy interventions and procedures to enhance safety, health and wellness, and performance in ADLs, IADLs, education, work, play, rest, sleep, leisure, and social participation.
3. Implement group interventions based on principles of group development and group dynamics across the lifespan.
4. Demonstrate therapeutic use of self, including one's personality, insights, perceptions, and judgments, as part of the therapeutic process in both individual and group interaction.

### **OTA 172 Management Concepts (2)**

*5 hours lecture per week for 6 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 110.*

*Recommended Preparation: A grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240.*

*Comment: Letter grade only. OTA 172 may not be audited. OTA 172 may not be taken credit/no credit. OTA 172 is only offered during the summer.*

OTA 172 focuses on the development of management skills for the occupational therapy assistant in traditional roles and non-traditional roles in emerging areas of practice. Program development, budgeting, marketing, scheduling, implementation and evaluation for continuous quality improvement will be discussed. Emerging areas of practice will be identified by analyzing community needs and studying trends in current and new areas.

Upon successful completion of OTA 172, the student should be able to:

1. Describe the role of the occupational therapy assistant in care coordination, case management, and transition services in traditional and emerging practice environments.
2. Identify the impact of contextual factors on the management and delivery of occupational therapy services.
3. Identify the systems and structures that create federal and state legislation and regulations and their implications and effects on practice.
4. Demonstrate knowledge of various reimbursement systems (e.g., federal, state, third party, private payer) and documentation requirements that affect the practice of occupational therapy.
5. Demonstrate the ability to participate in the development, marketing, and management of service delivery options.
6. Participate in the documentation of ongoing processes for quality improvement and implement program changes as needed to ensure quality of services.
7. Identify and appreciate the varied roles of the occupational therapy assistant as a practitioner, educator, and research assistant.
8. Identify professional responsibilities and issues when providing service on a contractual basis.

### **OTA 224 Health Care Concepts for the Elderly (2)**

*3 hours lecture per week for 10 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/L; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100 **or** higher-level English course; **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in OTA 236 **and** a grade of "C" or higher in OTA 236L **and** a grade of "C" or higher in OTA 237 **and** a grade of "C" or higher in OTA 237L **and** a grade of "C" or higher in OTA 232 **and** a grade of "C" or higher in OTA 233.*

*Corequisite(s): OTA 249 **and** OTA 224L **and** OTA 249L **and** OTA 270.*

*Comment: Letter grade only. OTA 224 may not be audited. OTA 224 may not be taken credit/no credit.*

OTA 224 examines occupational therapy concepts to improve occupational performance for the elderly as they age at home and in the community. This course focuses on demographic trends, theories of aging, common conditions and occupational therapy practice models. The influence of lifestyle on health and wellness, as well as, public policy and advocacy for the elderly will be examined. The role of the COTA working with families and caregivers to delivery services for the elderly who face a variety of challenges due to aging or disability will be discussed. Best practice strategies for the



prevention of injury and promotion of health in a variety of settings to address quality of life issues will be explored.

Upon successful completion of OTA 224, the student should be able to:

1. Express support for the quality of life, well-being, and occupation of the individual, group, or population to promote physical and mental health and prevention of injury and disease considering the context (e.g., cultural, personal, temporal, virtual) and environment.
2. Identify when to recommend to the occupational therapist the need for referring clients for additional evaluation.
3. Recognize and communicate the need to refer to specialists (both internal and external to the profession) for consultation and intervention.
4. Facilitate discharge planning by reviewing the needs of the client, caregiver, family, and significant others; available resources; and discharge environment, and identify those needs to the occupational therapist, client, and others involved in discharge planning. This process includes, but is not limited to, identification of community, human, and fiscal resources; recommendations for environmental adaptations; and home programming.

### **OTA 224L Elderly Concepts Laboratory (1)**

*4.5 hours lab per week for 10 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100 **or** higher-level English course; **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in OTA 232 **and** a grade of "C" or higher in OTA 233 **and** a grade of "C" or higher in OTA 236 **and** a grade of "C" or higher in OTA 236L **and** a grade of "C" or higher in OTA 237 **and** a grade of "C" or higher in OTA 237L **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240.*

*Corequisite(s): OTA 224 **and** OTA 249 **and** OTA 249L **and** OTA 270.*

*Comment: Letter grade only. OTA 224L may not be audited. OTA 224L may not be taken credit/no credit. Offered in the Spring semester only.*

OTA 224L focuses on the practice of those methods and techniques necessary to deliver occupational therapy services to the elderly with an emphasis on home and community programming. Students will administer selected assessments, develop intervention plans and practice skills to promote health and safety, prevent disease or disability in this population. Strategies for modifying environments and processes and reassessing activities of daily living (ADL) and instrumental activities of daily living (IADL)

interventions will be taught. Methods for educating and training caregivers and family to facilitate occupational performance in elderly clients will be learned and practiced.

Upon successful completion of OTA 224L, the student should be able to:

1. Adapt environments (e.g., home, work, school, community) and processes, including the application of ergonomic principles.
2. Provide training in techniques to enhance community mobility, including public transportation, community access, and issues related to driver rehabilitation.
3. Enable feeding and eating performance (including the process of bringing food or fluids from the plate or cup to the mouth, the ability to keep and manipulate food or fluid in the mouth, and the initiation of swallowing) and train others in precautions and techniques while considering client and contextual factors.
4. Use the teaching–learning process with the client, family, significant others, colleagues, other health providers, and the public. Collaborate with the occupational therapist and learner to identify appropriate educational methods.
5. Monitor and reassess, in collaboration with the client, caregiver, family, and significant others, the effect of occupational therapy intervention and the need for continued or modified intervention, and communicate the identified needs to the occupational therapist.

### **OTA 232 Fieldwork Level I: Physical Dysfunction/Development/Educational (2)**

*A total of 100 clinical hours per semester*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100 **or** higher-level English course; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/ 142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in HLTH 125 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 172.*

*Corequisite(s): OTA 233 **and** OTA 236 **and** OTA 236L **and** OTA 237 **and** OTA 237L.*

*Comment: Letter grade only. OTA 232 may not be audited. OTA 232 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and identification badge may also be required.*

OTA 232 is supervised practical experience with occupational therapy personnel or related professionals in which students apply knowledge gained in OTA courses. Settings include inpatient, outpatient, home/community-based programs and emerging areas of practice that focus on patient/clients in physical dysfunction/rehabilitation, or in an early intervention or school based programs. Following on-site objectives, students will

observe and participate in specific interventions appropriate to their skill level for 100 hours. Professional conduct is expected and performance will be documented and evaluated.

Upon successful completion of OTA 232, the student should be able to:

1. Use sound judgment in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
2. Effectively interact through written, oral, and nonverbal communication with the client, family, significant others, colleagues, other health providers, and the public in a professionally acceptable manner.
3. Effectively communicate and work interprofessionally with those who provide services to individuals and groups in order to clarify each member's responsibility in executing an intervention plan.

### **OTA 233 Critique: Fieldwork Level I: Physical Dysfunction and Developmental/Educational (1)**

*1 hour lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant Program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100 **or** higher-level English course; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in HLTH 125 **and** a grade of "C" or higher in OTA 112/112L **and** a grade of "C" or higher in OTA 161/161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126.*

*Corequisite(s): OTA 232 **and** OTA 236 **and** OTA 236L **and** OTA 237 **and** OTA 237L.*

*Comment: Letter grade only. OTA 233 may not be audited. OTA 233 may not be taken credit/no credit.*

OTA 233 is a discussion of student experiences in Fieldwork Level I with emphasis on problem solving, identifying ethical issues, sharing professional knowledge and insights. This course will provide an opportunity for the instructor to give feedback to students about various fieldwork situations. Students will also begin to examine and practice documentation methods for reporting Occupational Therapy services.

Upon successful completion of OTA 233, the student should be able to:

1. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services, adhering to the requirements of applicable facility, local, state, federal, and reimbursement agencies. Documentation must effectively communicate the need and rationale for occupational therapy services.
2. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services. Documentation

- must effectively communicate the need and rationale for occupational therapy services and must be appropriate to the context in which the service is delivered.
3. Identify strategies for effective, competency-based legal and ethical supervision of nonprofessional personnel.
  4. Demonstrate knowledge and understanding of the American Occupational Therapy Association (AOTA) Occupational Therapy Code of Ethics and Ethics Standards and AOTA Standards of Practice and use them as a guide for ethical decision making in professional interactions, client interventions, and employment settings.
  5. Identify strategies for analyzing issues and making decisions to resolve personal and organizational ethical conflicts.
  6. Identify the variety of informal and formal systems for resolving ethics disputes that have jurisdiction over occupational therapy practice.

### **OTA 236 Fundamentals of Assistive Technology (3)**

*3 hours lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in HLTH 125.*

*Corequisite(s): OTA 236L **and** OTA 237 **and** OTA 237L **and** OTA 232 **and** OTA 233.*

*Comment: Letter grade only. OTA 236 may not be audited. OTA 236 may not be taken credit/no credit.*

OTA 236 focuses on the preparation for and provision of assistive technology for individuals with physical disabilities. Information presented includes terminology, models, assessment, regulation, funding and roles of practitioners. Students will become familiar with basic principles relating to electronic enabling devices, augmentative and alternative communication, input and output options, low technology devices, and technologies for keyboarding and wheelchairs. Basic principles of work rehabilitation will be explored including interventions and compensatory strategies for ergonomics that facilitate occupational performance.

Upon successful completion of OTA 236, the student should be able to:

1. Explain the need for and use of compensatory strategies when desired life tasks cannot be performed.
2. Articulate principles of and demonstrate strategies with assistive technologies and devices (e.g., electronic aids to daily living, seating and positioning systems) used to enhance occupational performance and foster participation and well-being.

3. Recognize the use of superficial thermal and mechanical modalities as a preparatory measure to improve occupational performance. On the basis of the intervention plan, demonstrate safe and effective administration of superficial thermal and mechanical modalities to achieve established goals while adhering to contraindications and precautions.

### **OTA 236L Assistive Technology Lab (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 110.*

*Corequisite(s): OTA 236 **and** OTA 237L **and** OTA 237 **and** OTA 232 **and** OTA 233.*

*Comment: Letter grade only. OTA 236L may not be audited. OTA 236L may not be taken credit/no credit.*

OTA 236L focuses on the methods and techniques necessary to deliver occupational therapy services in the area of physical dysfunction, including evaluation and treatment interventions for basic functional rehabilitation. Assistive technology concepts including wheelchair seating and mobility, augmentative communication devices, environmental controls, and access issues are highlighted. Client choice and education for the client or care giver are also studied.

Upon successful completion of OTA 236L, the student should be able to:

1. Demonstrate an understanding of the use of technology to support performance, participation, health and well-being. This technology may include, but is not limited to, electronic documentation systems, distance communication, virtual environments, and telehealth technology.
2. Provide fabrication, application, fitting, and training in orthotic devices used to enhance occupational performance and participation, and training in the use of prosthetic devices.
3. Provide training in techniques to enhance functional mobility, including physical transfers, wheelchair management, and mobility devices.
4. Teach compensatory strategies, such as use of technology and adaptations to the environment, that support performance, participation, and well-being.

### **OTA 237 Physical Dysfunction Concepts (3)**

*3 hours lecture per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 or higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 or ESL100; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 110 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 or PSY 240.*

*Corequisite(s): OTA 236 **and** OTA 236L **and** OTA 237L **and** OTA 232 **and** OTA 233.*

*Comment: Letter grade only. OTA 237 may not be audited. OTA 237 may not be taken credit/no credit.*

OTA 237 focuses on the study of occupational therapy theory, frames of reference, intervention, remediation techniques, and adult physical conditions most commonly referred to occupational therapy. Models of service delivery in various settings, inpatient, outpatient, and home/community based are examined. The impact of socio-cultural and socioeconomic conditions, values, and lifestyle choices upon the delivery of services are explored.

Upon successful completion of OTA 237, the student should be able to:

1. Understand the effects of heritable diseases, genetic conditions, disability, trauma, and injury to the physical and mental health and occupational performance of the individual.
2. Provide development, remediation, and compensation for physical, mental, cognitive, perceptual, neuromuscular, behavioral skills, and sensory functions (e.g., vision, tactile, auditory, gustatory, olfactory, pain, temperature, pressure, vestibular, proprioception).

### **OTA 237L Physical Dysfunction Concepts Lab (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in MATH 100 or higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 or ESL 100 or higher-level English course; **and** a grade of "C" or higher HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 or PSY 240; **and** a grade of "C" or higher in OTA 110.*

*Corequisite(s): OTA 236 **and** OTA 236L **and** OTA 237 **and** OTA 232 **and** OTA 233.*

*Comment: Letter grade only. OTA 237L may not be audited. OTA 237L may not be taken credit/no credit. Offered in the Fall semester only.*

OTA 237L focuses on those methods and techniques necessary to the delivery of occupational therapy services in the area of adult physical dysfunction. Evaluation, treatment intervention planning, safety precautions, community resources, documentation and basic functional rehabilitation strategies will be the primary emphasis.

Upon successful completion of OTA 237L, the student should be able to:

1. Gather and share data for the purpose of evaluating client(s)' occupational performance in activities of daily living (ADLs), instrumental activities of daily living (IADLs), education, work, play, rest, sleep, leisure, and social participation.
2. Provide training in self-care, self-management, health management and maintenance, home management, and community and work integration.
3. Implement intervention strategies to remediate and/or compensate for cognitive deficits that affect occupational performance.
4. Under the direction of an administrator, manager, or occupational therapist, collect, organize, and report on data for evaluation of client outcomes.

### **OTA 249 Professional Concepts (2)**

*3 hours lecture per week for 10 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 **or** ESL 100; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in OTA 232 **and** a grade of "C" or higher in OTA 233 **and** a grade of "C" or higher in OTA 236 **and** a grade of "C" or higher in OTA 236L **and** a grade of "C" or higher in OTA 237 **and** a grade of "C" or higher in OTA 237L **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 110.*

*Corequisite(s): OTA 224 **and** OTA 224L **and** OTA 249L **and** OTA 270.*

*Comment: Letter grade only. OTA 249 may not be audited. OTA 249 may not be taken credit/no credit. Offered in the Spring semester only.*

OTA 249 reinforces those concepts and principles regarding professionalism for the occupational therapy assistant in the delivery of services. Advocacy for the consumer and the profession will be explored and applied through knowledge of the legislative process, professional organizations and social conditions impacting service delivery. Scholarly endeavors are promoted to describe and interpret the scope of the profession, establish new knowledge, and interpret and apply this knowledge to practice.

Upon successful completion of OTA 249, the student should be able to:

1. Articulate the importance of using statistics, tests, and measurements for the purpose of delivering evidence-based practice.
2. Identify the potential impact of current policy issues and the social, economic, political, geographic, or demographic factors on the practice of occupational therapy.
3. Identify the role and responsibility of the practitioner to advocate for changes in service delivery policies, to effect changes in the system, and to recognize opportunities in emerging practice areas.
4. Demonstrate knowledge of applicable national requirements for credentialing and requirements for licensure, certification, or registration under state laws.
5. Articulate the importance of how scholarly activities and literature contribute to the development of the profession.
6. Effectively locate and understand information, including the quality of the source of information.
7. Use professional literature to make evidence-based practice decisions in collaboration with the occupational therapist.
8. Identify how scholarly activities can be used to evaluate professional practice, service delivery, and/or professional issues (e.g., Scholarship of Integration, Scholarship of Application, Scholarship of Teaching and Learning).
9. Demonstrate the skills to read and understand a scholarly report.
10. Promote occupational therapy by educating other professionals, service providers, consumers, third-party payers, regulatory bodies, and the public.
11. Identify strategies to assist the consumer in gaining access to occupational therapy services.

### **OTA 249L Professional Concepts Lab (1)**

*4.5 hours lab per week for 10 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHYL 141/141L/142/142L; **and** a grade of "C" or higher in MATH 100 or higher-level mathematics course; **and** a grade of "C" or higher in ENG 100 or ESL 100; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in OTA 112 **and** a grade of "C" or higher in OTA 112L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 161 **and** a grade of "C" or higher in OTA 161L **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in OTA 232 **and** a grade of "C" or higher in OTA 233 **and** a grade of "C" or higher in OTA 236 **and** a grade of "C" or higher in OTA 236L **and** a grade of "C" or higher in OTA 237 **and** a grade of "C" or higher in OTA 237L **and** a grade of "C" or higher in HLTH 125; **and** a grade of "C" or higher in FAMR 230 or PSY 240; **and** a grade of "C" or higher in OTA 110.*

*Corequisite(s): OTA 224 **and** OTA 224L **and** OTA 249 **and** OTA 270.*

*Comment: Letter grade only. OTA 249L may not be audited. OTA 249L may not be taken credit/no credit. Offered in the Spring semester only.*



OTA 249L focuses on those methods and techniques necessary to develop professionalism. Students will advocate for the profession through participation in the legislation process and by addressing local or global health issues. Professional development strategies for national certification exam and employment will be demonstrated. Clinical observation and reasoning skills will be applied through participation in real life treatment scenarios in OT practice settings.

Upon successful completion of OTA 249L, the student should be able to:

1. Articulate to consumers, potential employers, colleagues, third-party payers, regulatory boards, policymakers, other audiences, and the general public both the unique nature of occupation as viewed by the profession of occupational therapy and the value of occupation support performance, participation, health, and well-being.
2. Promote the use of appropriate home and community programming to support performance in the client's natural environment and participation in all contexts relevant to the client.
3. Demonstrate skills of collaboration with occupational therapists and other professionals on therapeutic interventions.
4. Recommend to the occupational therapist the need for termination of occupational therapy services when stated outcomes have been achieved or it has been determined that they cannot be achieved. Assist with developing a summary of occupational therapy outcomes, recommendations, and referrals.
5. Explain and give examples of how the role of a professional is enhanced by knowledge of and involvement in international, national, state, and local occupational therapy associations and related professional associations.
6. Discuss strategies for ongoing professional development to ensure that practice is consistent with current and accepted standards.
7. Demonstrate professional advocacy by participating in organizations or agencies promoting the profession (e.g., AOTA, state occupational therapy associations, advocacy organizations).

### **OTA 270 Fieldwork Level II A (7)**

*40 hours clinical practice per week for 8 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; **and** a grade of "C" or higher in ENG 100 **or** ESL 100 **or** higher-level English course; **and** a grade of "C" or higher in MATH 100 **or** higher-level mathematics course; **and** a grade of "C" or higher in HLTH 118 **and** a grade of "C" or higher in PHY 141/141L/142/142L **and** a grade of "C" or higher in HLTH 290/290L **and** a grade of "C" or higher in OTA 110; **and** a grade of "C" or higher in FAMR 230 **or** PSY 240; **and** a grade of "C" or higher in OTA 111 **and** a grade of "C" or higher in HLTH 125 **and** a grade of "C" or higher in OTA 112/112L **and** a grade of "C" or higher in OTA 161/161L **and** a grade of "C" or higher in OTA 125 **and** a grade of "C" or higher in OTA 126 **and** a grade of "C" or higher in OTA 172 **and** a grade of "C" or higher in OTA 236/236L **and** a grade of "C" or higher in OTA 237/237L **and** a grade of "C" or higher in OTA 232 **and** a grade of "C" or higher in OTA 233 **and** AS Arts & Humanities elective course.*

*Corequisite(s): OTA 224/224L and OTA 249/249L.*

*Comment: Letter grade only. OTA 270 may not be audited. OTA 270 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required.*

OTA 270 is work experience in one area of occupational therapy practice under the supervision of a registered occupational therapist (OTR) or a certified occupational therapy assistant (COTA). Students will be involved in phases of the occupational therapy process and follow the operating procedures of the affiliation site. Students will develop clinical reasoning skills, ethical practice, professionalism, and entry-level competency.

Upon successful completion of OTA 270, the student should be able to:

1. Use sound judgment in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
2. Gather and share data for the purpose of evaluating client(s)' occupational performance in activities of daily living (ADLs), instrumental activities of daily living (IADLs), education, work, play, rest, sleep, leisure, and social participation.
3. Assist with the development of occupation-based intervention plans and strategies (including goals and methods to achieve them) on the basis of the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others.
4. Select and provide direct occupational therapy interventions and procedures to enhance safety, health and wellness, and performance in ADLs, IADLs, education, work, play, rest, sleep, leisure, and social participation.
5. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services. Documentation must effectively communicate the need and rationale for occupational therapy services and must be appropriate to the context in which the service is delivered.
6. Monitor and reassess, in collaboration with the client, caregiver, family, and significant others, the effect of occupational therapy intervention and the need for continued or modified intervention, and communicate the identified needs to the occupational therapist.

### **OTA 271 Fieldwork Level II B (7)**

*40 hours clinical practice per week for 8 weeks*

*Prerequisite(s): Acceptance into the Occupational Therapy Assistant program; and a grade of "C" or higher in ENG 100 or ESL 100 or higher-level English course; and a grade of "C" or higher in MATH 100 or higher-level mathematics course; and a grade of "C" or higher in HLTH 118 and a grade of "C" or higher in PHYL 141/141L/142/142L and a grade of "C" or higher in HLTH 290/290L and a grade of "C" or higher in OTA 110; and a grade of "C" or higher in FAMR 230 or PSY 240; and a grade of "C" or*

*higher in OTA 111 and a grade of "C" or higher in HLTH 125 and an AS/AH elective course and a grade of "C" or higher in OTA 112/112L and a grade of "C" or higher in OTA 161/161L and a grade of "C" or higher in OTA 125 and a grade of "C" or higher in OTA 126 and a grade of "C" or higher in OTA 172 and a grade of "C" or higher in OTA 236/236L and a grade of "C" or higher in OTA 237/237L and a grade of "C" or higher in OTA 232 and a grade of "C" or higher in OTA 233 and a grade of "C" or higher in OTA 224/224L and a grade of "C" or higher in OTA 249/249L and a grade of "C" or higher in OTA 270.*

*Comment: Letter grade only. OTA 271 may not be audited. OTA 271 may not be taken credit/no credit. Weekly practicum hours may vary to accommodate students, faculty, and health professionals. Students will be required to purchase and wear a specified uniform according to the requirements of the fieldwork setting. A KCC student patch and nametag may also be required.*

OTA 271 is the final course in the Occupational Therapy Assistant curriculum. Students work in an occupational therapy setting under the supervision of a registered occupational therapist (OTR) or a certified occupational therapy assistant (COTA) providing OT services to a client population different from that experienced in OTA 270. Students become involved in phases of the occupational therapy process under the operating procedures of the affiliation site to achieve entry-level competency. Upon satisfactory completion of this course, the student is eligible to sit for the national certification exam given by the National Board of Certification for Occupational Therapy (NBCOT).

Upon successful completion of OTA 271, the student should be able to:

1. Use sound judgment in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
2. Gather and share data for the purpose of evaluating client(s)' occupational performance in activities of daily living (ADLs), instrumental activities of daily living (IADLs), education, work, play, rest, sleep, leisure, and social participation.
3. Assist with the development of occupation-based intervention plans and strategies (including goals and methods to achieve them) on the basis of the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others.
4. Select and provide direct occupational therapy interventions and procedures to enhance safety, health and wellness, and performance in ADLs, IADLs, education, work, play, rest, sleep, leisure, and social participation.
5. Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services. Documentation must effectively communicate the need and rationale for occupational therapy services and must be appropriate to the context in which the service is delivered.
6. Monitor and reassess, in collaboration with the client, caregiver, family, and significant others, the effect of occupational therapy intervention and the need for continued or modified intervention, and communicate the identified needs to the occupational therapist.

## **OCEANOGRAPHY**

### **OCN 101 Introduction to Marine Option Program (1)**

*1 hour lecture per week*

*Recommended Preparation: ENG 100.*

*Comment: OCN 101 is a required course for the Marine Option Program. OCN 101 may not be audited.*

OCN 101 provides the student with an overview of statewide issues, agencies and organizations involved in ocean and freshwater activities to students interested in becoming involved in the Marine Option Program (MOP). The course will review the requirements of the MOP Certificate and explore opportunities for internships, research projects and careers related to aquatic environments. The course will present guidelines for the MOP skills project: proposal writing, project implementation, data collection and interpretation, and final report preparation and presentation.

Upon successful completion of OCN 101, the student should be able to:

1. Identify an appropriate Marine Options Program (MOP) skills project topic.
2. Use critical thinking and analytical skills to complete a written project proposal for their Marine Options Program (MOP) skills project.
3. Create a student success plan to facilitate the completion of their Marine Options Program (MOP) certificate.

### **OCN 201 Science of the Sea (3) KCC AA/DP**

*3 hours lecture per week*

OCN 201 is a survey of the science of oceanography involving the study of the ocean environment including the physical, chemical, biological, geological, and ecological aspects of the oceans. The origin and extent of the oceans including the nature of ocean basins and crust; the causes and effects of currents, waves, and tides; biogeochemical cycles; plant and animal life in the sea, and marine ecology will also be in focus.

Upon successful completion of OCN 201, the student should be able to:

1. Describe interactions between the atmosphere and the ocean, and how those interactions influence physical and chemical ocean processes.
2. Describe the effects of physical and chemical properties on biological systems in the ocean, and how those systems respond to change.
3. Implement the scientific method and analyze current scientific research related to ocean science.

**OCN 201L Science of the Sea Laboratory (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in OCN 201.*

OCN 201L is the companion laboratory to OCN 201. The lab will consist of experiments, computer exercises and field trips demonstrating the geological, physical, chemical, and biological principles of earth and ocean sciences.

Upon successful completion of OCS 201L, the student should be able to:

1. Apply the scientific method to investigate the physical, chemical and geological processes that shape the oceans.
2. Apply the concepts learned in OCN 201 during lab and field experimental inquiry.
3. Demonstrate proper use of basic oceanographic field and lab equipment and methods to gather data on the world's oceans and analyze and interpret results.

**OCEAN and EARTH SCIENCE and TECHNOLOGY**

**OEST 101 Natural Hazards (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100.*

OEST 101 is a survey of the science of natural hazards and the impact on human civilization due to events in the lithosphere, atmosphere, biosphere, and hydrosphere (e.g., earthquakes, hurricanes, red tides, floods, and wildfires.) The impact of humans on their exposure to and mitigation of the hazards is also covered.

Upon successful completion of OEST 101, the student should be able to:

1. Explain the relevance of oceanography, geology, and geophysics to human needs, including those appropriate to Hawaii, and be able to discuss issues related to geology and its impact on society and planet Earth.
2. Use the scientific method to define, critically analyze, and solve problems in ocean and earth sciences.
3. Reconstruct, clearly and ethically, oceanographic and geological knowledge in both oral presentations and written reports.
4. Describe interactions between the atmosphere and the ocean, and how those interactions influence physical and chemical ocean processes.
5. Evaluate, interpret, and summarize the basic principles of oceanography, geology, and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in oceanography, geology, and geophysics.

### **OEST 201 Climate Science (4)**

*3 hours lecture per week, 3 hours lab per week*

*Prerequisite(s): Qualification for MATH 140 or credit in MATH 135, MATH 241, 242, 243, 244 or a higher-level mathematics course*

*Recommended Preparation: OEST 101.*

OEST 201, an introductory climate science course, investigates the physical laws governing the Earth's climate and their interactions with chemical and biological processes on land and in the atmosphere, oceans, and cryosphere. Past, present, and potential future climate changes due to natural and human causes are assessed using a variety of observations, models, and computer programming. OEST 201 provides an overview of the Octave programming language and environment.

Upon successful completion of OEST 201, the student should be able to:

1. Describe the importance of the atmosphere to life on Earth and the role the solar system has in setting global weather and climate patterns.
2. Describe the difference between weather and climate.
3. Demonstrate an understanding of the connection between fundamental physical principles, weather, and climate.
4. Apply technical knowledge of the Octave programming language and environment to solve real-world problems in the Earth Sciences.

## **PACIFIC ISLANDS STUDIES**

### **PACS 108 Pacific Worlds: An Introduction to Pacific Islands Studies (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100.*

PACS 108 introduces students to the geography, societies, histories, cultures, contemporary issues, and arts of Oceania, including Hawai'i. Combines lectures and discussion that emphasize Pacific Islander perspectives and experiences.

Upon successful completion of PACS 108, the student should be able to:

1. Locate and name the island groups, geographic regions, and political entities of Oceania.
2. Describe social and cultural similarities and differences among Pacific Island societies.
3. Identify themes in the works of Pacific Island artist and writers.

4. Discuss contemporary social, political, economic, cultural, and environmental issues in the Pacific Islands.
5. Explain significant themes in indigenous, colonial, and postcolonial histories of the Pacific Islands.

### **PACS 201 Islands of Globalization (3)**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100.*

*Recommended Preparation: PACS 108 or HWST 107.*

*Comment: PACS 201 requires participation in a community service field trip off-campus. Students must be able to arrange for their own transportation to the site, located in Honolulu.*

PACS 201 examines the nature and impact of globalization on Pacific Island societies, viewed from the perspective of islanders who engage with global forces and processes and create strategies to survive.

Upon successful completion of PACS 201, the student should be able to:

1. Discuss globalization and its impacts on Oceania.
2. Analyze the forces, dimensions, and processes of globalization.
3. Summarize the main events, issues and characteristics of Oceania's histories and cultures, and their contemporary opportunities and challenges.
4. Describe how Pacific Islanders engage with globalization.

### **PACS 202 Pacific Islands Movement and Migration (3)**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100.*

*Recommended Preparation: PACS 108 or HWST 107.*

*Comment: PACS 202 requires participation in a community service field trip off-campus. Students must be able to arrange for their own transportation to the site, located in Honolulu.*

PACS 202 examines the diaspora of Pacific Islanders. Through community engagement and cultural, social, political and economic lenses, groups of Pacific Islanders living in places other than their homelands will be explored.

Upon successful completion of PACS 202, the student should be able to:

1. Define and discuss diaspora relating to Pacific Island peoples.
2. Identify how Pacific Islanders engage with issues of movement and migration in the Pacific.
3. Discuss cultural, social, political, environmental, and economic issues as they relate to diasporic Pacific communities.
4. Describe the diversity of contemporary Pacific Island cultural formations in urban and modern spaces.

## PHARMACOLOGY

### **PHRM 110 Basic Clinical Pharmacology (2)**

*2 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PHYL 141 or a grade of "C" or higher in ZOOL 141; and a grade of "C" or higher in HLTH 110 or a grade of "C" or higher in HLTH 125; and a grade of "C" or higher or concurrent enrollment in PHYL 142 or a grade of "C" or higher in ZOOL 142. Prerequisites may be waived by the consent of instructor.*

*Comment: Letter grade only. PHRM 110 may not be taken credit/no credit. PHRM 110 may not be audited.*

PHRM 110 covers the broad scope of pharmacology including definitions, drug standards, classification, legislation of drugs and administration of drugs; survey of medications commonly used in the prevention, diagnosis, and treatment of diseases, with discussion of pharmacological action, side effects, and related responsibilities.

Upon successful completion of PHRM 110, the student should be able to:

1. Identify major drug classifications and common drugs within each classification.
2. Interpret abbreviations and symbols accurately as they relate to drug administration.
3. Explain standards and legislation related to selected drugs.
4. Use appropriate references for obtaining drug information.
5. Identify drugs commonly used in the prevention, diagnosis, and treatment of common diseases affecting body systems (action, side effect, and related responsibilities).
6. Recognize major factors that affect drug action.
7. Identify commonly used immunizations for the prevention of specific diseases.
8. Identify major drug classifications, and common drugs within each classification, used in treatment of specific infectious disease conditions.
9. Identify major drug classifications, and drugs within each classification, commonly used in treatment of specific disease conditions encountered in the medical office.
10. Cite specific action, side effects, and responsibilities related to use of all pharmaceuticals discussed in class.

### **PHRM 203 General Pharmacology (3)**

*3 hours lecture per week*

*Prerequisite(s): ZOOL 141 or PHYL 141; and ZOOL 142 or PHYL 242*

*Recommended Preparation: Chemistry.*

*Comment: PHRM 203 may be audited with the instructor's permission. PHRM 203 may not be taken credit/no credit.*



PHRM 203 is a general pharmacology course that includes discussion of the major categories of drugs, their mechanism of action, toxicity, administration considerations, and uses. This course is intended for students in nursing and other health programs.

Upon successful completion of PHRM 203, the student should be able to:

1. Define “pharmacodynamics” and identify factors which affect the pharmacodynamics of drugs used in the maintenance of health and the prevention and treatment of illness.
2. Identify the major categories of drugs used for the major body systems and functions.
3. Identify the primary physiologic actions, pharmacodynamic interactions, and pharmacotherapeutic applications, including administration considerations for commonly prescribed and administered medications.
4. Describe major current developments in drug therapy.
5. Describe the ethical and legal responsibility in the administration of drugs for the nurse and other health personnel.

## **PHILOSOPHY**

### **PHIL 100 Introduction to Philosophy (3) KCC AA/DH and KCC AS/AH**

*3 hours lecture per week*

*Recommended Preparation: Credit in or qualification for ENG 100 or credit in or qualification for ESL 100.*

PHIL 100 offers a survey of various methods, values, and types of philosophies.

Upon successful completion of PHIL 100, the student should be able to:

1. Evaluate and critique major worldviews that have dominated philosophy, while reflecting upon our own worldviews and value systems.
2. Demonstrate familiarity with major concepts, theoretical perspectives, and contemporary trends in philosophy, such as the nature of reality, types of knowledge, ethical frameworks, and problems of marginalization.
3. Construct and articulate ideas clearly in writing.

### **PHIL 101 Morals and Society (3)**

*3 hours lecture per week*

*Prerequisite(s): Credit in or qualification for ENG 100 or credit in or qualification for ESL 100.*

PHIL 101 introduces philosophical problems and methods, emphasizing issues and questions in contemporary society: What is human happiness? What are our rights and responsibilities? How should we address issues of life and death?

Upon successful completion of PHIL 101, the student should be able to:

1. Explain the major views that have defined philosophical debate on ethical matters to include: virtue ethics, Egoism, Utilitarian theory and Deontological theory.
2. Explain one's understanding of cultural differences in the areas of moral and social value as applied to contemporary issues.
3. Express ideas and opinions clearly, orally and in writing on a range of contemporary issue using critical reasoning and ethical concepts.

### **PHIL 103 Introduction to Philosophy: Environmental Philosophy (3) KCC AA/DH and KCC AS/AH**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100.*

PHIL 103 offers a critical examination of environmental issues: analyzing the qualities and characteristics of human beings, the qualities and characteristics of nature in general, and the relationship and responsibilities of human beings vis-à-vis nature.

Upon successful completion of PHIL 103, the student should be able to:

1. Summarize key metaphysical and epistemological assumptions underlying different cultural conceptions of humans and nature.
2. Discuss underlying values and implications in the notions of land health and land ethics and apply these concepts to specific environmental problems or successes.
3. Clearly articulate orally and in writing a reflective point of view regarding personal responsibility on a range of ecologically important issues.

### **PHIL 111 Introduction to Inductive Logic (3) KCC AA/FQ**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 or qualification for ESL 100.*

PHIL 111 offers an introduction to inductive reasoning focusing on the role of probability. Students will learn how probabilities, statistics, and risk evaluations are integrated into decision making. More generally, they will develop reasoning strategies that promote drawing logical inferences when evidence leaves them unsure as to what is actually true. Application to the media's use of probabilities and statistics, and the way many academic disciplines use these strategies to analyze and present data will provide concrete contexts for applying inductive principles and reasoning strategies.

Upon successful completion of PHIL 111, the student should be able to:

1. Apply decision theory via the application of mathematical and logical definitions and terms to help make effective decisions to solve specific problems or achieve specific goals.
2. Apply analytic skills using quantitative methods and logical concepts to make effective decisions that solve specific problems and achieve specific goals.

### **PHIL 250 Ethics in Health Care (3) KCC AA/DH and KCC AS/AH**

*3 hours lecture per week*

PHIL 250 is an exploration of basic ethical theories and their application to ethical dilemmas with discussion of various methods of decision-making. It engages students in the critical analysis of the ethical dimensions of health care.

Upon successful completion of PHIL 250, the student should be able to:

1. Demonstrate familiarity with both the literature of ethical theory and with the application of ethical theories to ethical dilemmas in "real life" situations.
2. Employ a variety of methods such as Problem-Based Learning for the study of ethical problems.
3. Construct appropriate criteria for decision-making competency that accommodate multicultural perspectives.
4. Differentiate personal moral values from professional ethics and obligations in a legal context.

## **PHYSICAL THERAPIST ASSISTANT**

### **PTA 101 Professional Issues I: Introduction to Physical Therapy (1)**

*1 hour lecture per week*

*Prerequisite(s): A grade of "C" or higher or concurrent enrollment in ENG 100.*

*Recommended Preparation: PHIL 250.*

*Comment: Letter grade only. PTA 101 may not be audited. PTA 101 may not be taken credit/no credit. There is a 16 hour clinical observation requirement.*

PTA 101 explores the roles and careers of physical therapists and physical therapist assistants in the context of health care systems. Students attend and write summaries of professional meetings, conduct a variety of interviews, and observe or volunteer in a physical therapy clinic. Students will explore the use of the internet for physical therapy information. PTA 101 also explores the US health care system and other international systems.

Upon successful completion of PTA 101, the student should be able to:

1. Explain the roles of physical therapists and physical therapist assistants.
2. Define the key terms in physical therapy using "The APTA Guide to Physical Therapy Practice".
3. Identify the key services provided by physical therapy in health care systems.

4. Complete 16 or more hours of observation/volunteer service in a physical therapy clinic.
5. Describe conduct that reflects the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe, a commitment to the profession of physical therapy and the consumers of health care services.
6. Explain the purpose of physical therapy and the scope of PTA practice to clients, community and others.
7. Describe the personal responsibility for career development, patient advocacy, life-long learning and membership in the professional association.
8. Read, locate and interpret health care literature, documents or Internet information.
9. Identify the history and development of physical therapy as a profession.
10. Discuss billing, reimbursement, and legislative issues in health care.
11. State aspects of planning and operating PT services.
12. Locate and write a summary of the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.
13. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
14. Compare and contrast the U.S. health care system with other international systems.
15. List appropriate authorities to report suspected cases of abuse of vulnerable populations.
16. Define fraud and abuse related to the utilization of and payment for physical therapy services and identify the appropriate authorities to report suspected cases.

### **PTA 205 Measurement for the Physical Therapist Assistant (1.5)**

*4.5 hours lecture/lab per week for 10 weeks*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director; **or** a grade of "C" or higher or concurrent enrollment in HLTH 290 **and** a grade of "C" or higher or concurrent enrollment in HLTH 290L.*

*Comment: Students will need to purchase the APTA Student kit, which includes the measurement tools for PTA 205. Letter grade only. PTA 205 may not be audited. PTA 205 may not be taken credit/no credit.*

PTA 205 provides the opportunity practical development on the theory and skills required for basic measurements within the scope of practice of the Physical Therapist Assistant. Performance skills in goniometry, gross manual muscle testing, ROM, circumferential and axial measurements are demonstrated through hands-on skill activities and group practice sessions.

Upon successful completion of PTA 205, the student should be able to:

1. Perform competent joint range of motion measurements and appropriate recording of the result.

2. Perform and pass vital signs certification.
3. Measure and document patient height and weight.
4. Competently measure and accurately document limb length and girth.
5. Document normal and abnormal muscle length and joint movements.
6. Perform manual muscle strength testing and document the results.
7. Identify the presence or absence of muscle mass and tone.
8. Identify contraindications and precautions to any PT intervention and changes needing the attention of the supervising PT.
9. Define and practice Universal/Standard precautions of the CDC during the measurement techniques.
10. Effectively explain the purpose of the measurement assessment and result to the physical therapist, clients, community and others.
11. Describe OSHA regulations.
12. Read, locate and interpret health care literature, documents or Internet information.
13. Achieve a passing score in the clinical internship course series.
14. Communicate data and information from PT interventions in written documentation with the patient, family, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
15. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
16. Demonstrate conduct that reflect the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and the community.
17. Describe the personal responsibility for career development, patient advocacy, life-long learning and membership in the professional association.

### **PTA 206 Measurement for the Physical Therapist Assistant (1)**

*1 hour lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director; **or** a grade of “C” or higher in HLTH 290 **and** a grade of “C” or higher or in HLTH 290L.*

*Comment: Letter grade only. PTA 206 may not be audited. PTA 206 may not be taken credit/no credit.*

PTA 206 provides the theory and knowledge required for basic measurements within the scope of practice of the Physical Therapist Assistant. Performance skills in goniometry, gross manual muscle testing, ROM, circumferential and axial measurements discussed. The student will be required to apply these principles in the companion course, PTA 206L.

Upon successful completion of PTA 206, the student should be able to:

1. Describe techniques to competently measure joint range of motion and appropriately document the result.
2. Describe the procedures for vital sign assessment including heart rate, blood

- pressure, respiratory rate, and pulse.
3. Describe techniques to accurately document patient height and weight.
  4. Describe techniques to accurately measure and document limb length and girth.
  5. Document normal and abnormal muscle length and joint movements.
  6. Describe techniques to perform manual muscle strength testing and document the results.
  7. Identify the presence or absence of muscle mass and tone.
  8. Identify contraindications and precautions to any PT intervention and changes needing the attention of the supervising PT.
  9. Define and practice Universal/Standard precautions of the CDC during the measurement techniques.
  10. Effectively explain the purpose of the measurement assessment and result to the physical therapist, clients, community and others.
  11. Communicate data and information from PT interventions in written documentation with the patient, family, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
  12. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.

### **PTA 206L Measurement for the Physical Therapist Assistant Lab (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director; **or** a grade of “C” or higher or concurrent enrollment in HLTH 290 **and** a grade of “C” or higher or concurrent enrollment in HLTH 290L.*

*Comment: Letter grade only. PTA 206L may not be audited. PTA 206L may not be taken credit/no credit.*

PTA 206L provides the opportunity for practical development of the skills required for basic measurements within the scope of practice of the Physical Therapist Assistant. Performance skills in goniometry, gross manual muscle testing, ROM, circumferential and axial measurements are demonstrated through hands-on skill activities and group practice sessions. Students are required to apply and correlate the principles from PTA 206 in their lab assignments and activities.

Upon successful completion of PTA 206, the student should be able to:

1. Perform competent joint range of motion measurements and appropriate recording of the result.
2. Perform and pass vital signs certification.
3. Measure and document patient height and weight.
4. Competently measure and accurately document limb length and girth..
5. Document normal and abnormal muscle length and joint movements.
6. Perform manual muscle strength testing and document the results.
7. Identify the presence or absence of muscle mass and tone.

8. Identify contraindications and precautions to any PT intervention and changes needing the attention of the supervising PT.
9. Define and practice Universal/Standard precautions of the CDC during the measurement techniques.
10. Effectively explain the purpose of the measurement assessment and result to the physical therapist, clients, community and others.
11. Communicate data and information from PT interventions in written documentation with the patient, family, PT, health care delivery personnel and others in an effective, appropriate and capable manner.
12. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.

### **PTA 209 Therapeutic Modalities (1.5) Fall**

*1.5 hours lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director.*

*Comment: PTA 209 is offered in the Fall semester only. Letter grade only. PTA 209 may not be audited. PTA 209 may not be taken credit/no credit.*

PTA 209 introduces patient care techniques including patient preparation, and the theories and practical application of physical therapy interventions and biophysical agents. The physiological effects of heat, cold, radiant therapy, traction, intermittent compression and ultrasound are emphasized. Indications/contraindications and ethical aspects will be included.

Upon successful completion of PTA 209, the student should be able to:

1. Describe methods for implementing selected interventions identified in the plan of care established by the physical therapist. Interventions include: Biophysical Agents; Biofeedback, Compression Therapies, Cryotherapy, Hydrotherapy, Superficial and Deep Thermal Agents, Traction, Light Therapies, Compression Therapies.
2. Determine when an intervention should not be performed due to clinical indications or when the direction to perform the intervention is beyond that which is appropriate for the physical therapist assistant.
3. Monitor and adjust interventions in the plan of care in response to patient/client status.
4. Recognize and discuss duties in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.

### **PTA 209L Therapeutic Modalities Lab (2) Fall**

*4.5 hours lab per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.*

*Comment: PTA 209L is offered in the Fall semester only. Letter grade only. PTA 209L may not be audited. PTA 209L may not be taken credit/no credit.*

PTA 209L introduces patient care techniques including patient preparation, and the theories and practical application of physical therapy interventions and biophysical agents. The physiological effects of heat, cold, radiant therapy, traction, intermittent compression and ultrasound are emphasized. Indications/contraindications and ethical aspects will be included. Students are required to apply and correlate the principles from PTA 209 in their lab assignments and activities.

Upon successful completion of PTA 209L, the student should be able to:

1. Describe methods for implementing selected interventions identified in the plan of care established by the physical therapist. Interventions include: Biophysical Agents, Biofeedback, Compression Therapies, Cryotherapy, Hydrotherapy, Superficial and Deep Thermal Agents, Traction and Light Therapies.
2. Determine when an intervention should not be performed due to clinical indications or when the direction to perform the intervention is beyond that which is appropriate for the physical therapist assistant.
3. Monitor and adjust interventions in the plan of care in response to patient/client status.
4. Recognize and discuss duties in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.

### **PTA 210 Introduction to Clinical Education (2)**

*2 hours lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.*

*Comment: Letter grade only. PTA 210 may not be audited. PTA 210 may not be taken credit/no credit.*

PTA 210 Introduction to Clinical Education is a 15-week preparatory course in clinical education. Students will learn and discuss requirements for practicing within a clinic environment, the Guide for Conduct of the Physical Therapist Assistant, APTA Values-Based Behaviors for the PTA, and communication skills with patients and family members, interprofessional team members and Physical Therapists. Students will also understand the dynamics of working during their future internship within a physical therapist's plan of care.

Upon successful completion of PTA 210, the student should be able to:

5. Recognize and discuss suspected cases of abuse of vulnerable populations.



6. Recognize and discuss suspected cases of fraud and abuse related to the utilization of and payment for physical therapy and other health care services.
7. Review and discuss duties in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.
8. Review and discuss duties in a manner consistent with APTA's Values-Based Behaviors for the Physical Therapist Assistant.
9. Recognize and respond with consideration for patients'/clients' differences, values, preferences, and expressed needs in all work-related activities.
10. Communicate and discuss effectively with stakeholders including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policymakers.
11. Recognize patient/client and environmental emergencies in the clinical setting.
12. Recognize and discuss efforts to increase patient and healthcare provider safety.

### **PTA 214 Neurorehabilitation (1)**

*1 hour lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 214 may not be audited. PTA 214 may not be taken credit/no credit.*

PTA 214 presents the neurological anatomy, physiology, pathology, etiology, psychological, social and rehabilitative concepts for patients with various neuropathologies. The focus of this course is to develop theoretical knowledge of therapeutic interventions used for patients with neuropathologies such as Traumatic Brain Injury (TBI), Spinal Cord Injury (SCI), Cerebral Vascular Accident (CVA), Guillain-Barre Syndrome, Parkinson's, Alzheimer's, Polio, Amyotrophic Lateral Sclerosis (ALS), Multiple Sclerosis (MS), various dystrophies and other neuropathology acquired in adulthood. The student will be required to apply these principles in the companion course, PTA 214L.

Upon successful completion of PTA 214, the student should be able to:

1. Communicate data and information from physical therapy (PT) interventions in written, verbal, and non-verbal methods with the patient, family, significant other, PT, healthcare delivery personnel and others in an effective, appropriate and capable manner using accepted medical terminology.
2. Identify, respect, and act with consideration for patients'/clients' differences, values, preferences, and expressed needs in all work-related activities.
3. Explain conduct that reflects the American Physical Therapy Association (APTA) Guide to Physical Therapist Practice, that promotes legal, ethical, and safe practice and a commitment to the profession of physical therapy that meets the expectations of consumers receiving health care services.

4. State the influences of positional changes, breathing patterns and thoracoabdominal movements in neuropathologies.
5. Identify and apply problem-solving knowledge to address and modify a PT program in response to patient safety and clinical indications such as symptoms aggravated by activities within the scope of PTA practice and report the findings to the supervising PT
6. Identify the variety of neurological status measurement scales used to identify changes in arousal, mentation and cognition of patients.
7. Describe activities, positions and postures that aggravate or relieve pain and that influence integumentary health.
8. Identify the individual's or caregiver's ability to care for the assistive, adaptive, prosthetic, orthotics and supportive devices in a safe manner
9. Identify and describe normal and abnormal movement patterns and the presence or absence of selective motor control in patients with neuropathologies presented in the course
10. Describe and identify architectural barriers in the home or community that may assist or hinder clients with neuropathologies.
11. Identify indications, contraindications and precautions to any PT intervention or the patient's present clinical status covered in the course.
12. Explain the purpose of physical therapy, the scope of PTA practice, the scope of practice between the various rehabilitation services and the multidisciplinary team approach in patient care and non-patient care activities.
13. Describe the appropriate action and behavior in emergency situations.
14. Identify basic concepts in professional literature including, but not limited to, validity, reliability and level of statistical significance.
15. Identify and integrate appropriate evidence-based resources to support clinical decision-making for progression of the patient within the plan of care established by the PT.

### **PTA 214L Neurorehabilitation Lab (1)**

*3 hours lab per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 214L may not be audited. PTA 214L may not be taken credit/no credit.*

PTA 214L presents the neurological anatomy, physiology, pathology, etiology, psychological, social and rehabilitative concepts for the application of therapeutic interventions for patients with various neuropathologies. The focus of this course is to develop theoretical knowledge and perform clinical scenarios of therapeutic interventions used for patients with neuropathologies such as Traumatic Brain Injury (TBI), Spinal Cord Injury (SCI), Cerebral Vascular Accident (CVA), Guillain-Barre Syndrome, Parkinson's, Alzheimer's, Polio, Amyotrophic Lateral Sclerosis (ALS), Multiple Sclerosis (MS), various dystrophies and other neuropathology acquired in adulthood.

Students are required to apply and correlate the principles from PTA 214 in their lab assignments and activities.

Upon successful completion of PTA 214L, the student should be able to:

1. Communicate data and information from physical therapy (PT) interventions in written, verbal, and non-verbal methods with the patient, family, significant other, PT, healthcare delivery personnel and others in an effective, appropriate and capable manner using accepted medical terminology.
2. Identify, respect, and act with consideration for patients'/clients' differences, values, preferences, and expressed needs in all work-related activities.
3. Explain conduct that reflects the American Physical Therapy Association (APTA) Guide to Physical Therapist Practice, that promotes legal, ethical, and safe practice and a commitment to the profession of physical therapy that meets the expectations of consumers receiving health care services.
4. Implement the plan of care developed by the PT to achieve the short- and long-term goals of treatment and intended outcomes.
5. Implement through demonstration, the safe, effective and efficient competence in selected components of PT interventions identified in the plan of care: (1) Motor learning concepts, (2) Movement analysis, (3) Functional training, (4) Therapeutic exercise, (5) Gait analysis and training, (6) Neuromuscular re-education.
6. Perform competent skill of previous PT intervention applicable to neuropathologies: (1) Assistive/adaptive devices, (2) Body mechanics and posture awareness, (3) Gait and locomotion training, (4) Prosthetics and orthotics, (5) Wheelchair management skills, (6) Architectural barriers, (7) Balance and coordination training, (8) Breathing exercises, coughing and postural drainage, (9) Conditioning and reconditioning exercises and techniques, (10) Positioning, (11) Range of motion exercises, (12) Stretching techniques and exercises.
7. State the influences of positional changes, breathing patterns and thoracoabdominal movements in neuropathologies.
8. Identify and apply problem-solving knowledge to address and modify a PT program in response to patient safety and clinical indications such as symptoms aggravated by activities within the scope of PTA practice and report the findings to the supervising PT.
9. Identify the variety of neurological status measurement scales used to identify changes in arousal, mentation and cognition of patients.
10. Describe and demonstrate activities, positions and postures that aggravate or relieve pain and that influence integumentary health.
11. Identify the individual's or caregiver's ability to care for the assistive, adaptive, prosthetic, orthotics and supportive devices in a safe manner
12. Identify and demonstrate normal and abnormal movement patterns and the presence or absence of selective motor control in patients with neuropathologies presented in the course
13. Describe and identify architectural barriers in the home or community that may assist or hinder clients with neuropathologies.
14. Identify indications, contraindications and precautions to any PT intervention or the patient's present clinical status covered in the course.

15. Explain the purpose of physical therapy, the scope of PTA practice, the scope of practice between the various rehabilitation services and the multidisciplinary team approach in patient care and non-patient care activities.
16. Demonstrate appropriate action and behavior in emergency situations.
17. Identify basic concepts in professional literature including, but not limited to, validity, reliability and level of statistical significance.

**PTA 231 Professional Issues II: Documentation (2)**

*2 hours lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program or consent of PTA Program Director; and a grade of "C" or higher in PTA 101.*

*Comment: Letter grade only. PTA 231 may not be audited. PTA 231 may not be taken credit/no credit.*

PTA 231 is designed to improve the student's knowledge and skill of documentation and promote professional conduct. A variety of documentation forms and coding systems used in patient records to comply with billing, third-party payers and legal requirements are reviewed. Students will apply technical writing appropriate to current and future major coursework. In addition, the course examines professional conduct and Physical Therapy (PT) intervention as described in the American Physical Therapy Association's (APTA) Guide to Physical Therapist Practice and international organizations.

Upon successful completion of PTA 231, the student should be able to:

1. Communicate data and information from PT interventions in written documentation with the patient, family, PT, healthcare delivery personnel and others in an effective, appropriate and capable manner.
2. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
3. Explain conduct that reflects the American Physical Therapy Association's (APTA) Guide to Physical Therapist Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and meet the expectations of consumers receiving health care services.
4. Record sample data of PT interventions essential to the plan of care using appropriate medical terminology, a variety of forms, documentation styles such as Subject, Objective, Assessment, Plan (SOAP) notes, billing and reimbursement in an accurately and timely manner.
5. Explain the purpose of physical therapy and the scope of physical therapist assistant (PTA) practice to simulated clients, community service learning opportunities and others.
6. Distinguish the scope of practice between the various rehabilitation services.
7. Read, locate and interpret health care literature, documents, Internet information, the APTA code of conduct, APTA website of information for standardized practice and individual state practice acts for physical therapy.

8. Identify the personal responsibility for career development, patient advocacy, life-long learning, membership in the professional association and aspects of planning and operating PT services.
9. Advocate PT legislative issues involving health care.
10. Accept and implement feedback from instructors, clinical instructors and others for documentation performance improvement.
11. State the importance of time management skills to function as an entry-level PTA practitioner.
12. Describe situations of fraud and abuse related to the utilization of, and payment for, physical therapy and other healthcare services and select the appropriate authority to whom the suspected cases should be reported.
13. Appropriately document and interpret results of standardized questionnaires, graphs, behavioral scales, or visual analog scales for pain.

**PTA 244 Advanced Therapeutic Interventions (1.5)**

*variable hours per week for a total of 22.5 lecture hours*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 244 may not be audited. PTA 244 may not be taken credit/no credit.*

PTA 244 presents the theory of therapeutic interventions as they relate to amputations, cardiopulmonary conditions, wounds, peripheral vascular disease, burns, lymphedema and Obstetrics and Gynecology (OB/GYN) conditions. It reviews basic physiology, pathology and etiology of the named conditions. An overview of the most commonly seen surgical and nonsurgical interventions will be included. The student will be required to apply these principles in the companion course, PTA 244L..

Upon successful completion of PTA 244, the student should be able to:

1. Identify the physiology, pathology and etiology of amputations, burns, PVD, wounds, lymphedema, cardiopulmonary conditions and OB/GYN conditions while being sensitive to ethnic and cultural issues and biases.
2. Identify the anatomical structures involved in the pathologies presented.
3. Describe appropriate surgical and non-surgical interventions as they apply to each presented diagnosis.
4. Describe the treatment interventions and suggest modifications in response to the range of simulated patient outcomes as appropriate.
5. Describe the contraindications and precautions for each simulated diagnosis and intervention.
6. Identify the requirements of universal precautions and Occupational Safety and Health Administration (OSHA) guidelines as they apply to physical therapy practice.
7. Use approved terminology in the documentation process of each simulated session of care.

**PTA 244L Advanced Therapeutic Interventions Lab (1.5)**

*Variable hours per week for a total of 67.5 lab hours*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 244L may not be audited. PTA 244L may not be taken credit/no credit.*

PTA 244L presents the application of therapeutic interventions as they relate to amputations, cardiopulmonary conditions, wounds, peripheral vascular disease, burns, lymphedema and Obstetrics and Gynecology (OB/GYN) conditions. It reviews basic physiology, pathology and etiology of the named conditions. An overview of the most commonly seen surgical and nonsurgical interventions will be included. By using lab simulation and role playing of actual clinical situations the students will use information to think analytically, problem solve and modify treatment interventions. Isolation techniques, prosthetic and orthotic fitting will be practiced. An integrated approach to treatment will include material from all previous courses with an emphasis on therapeutic exercise.

Upon successful completion of PTA 244L, the student should be able to:

1. Identify the physiology, pathology and etiology of amputations, burns, PVD, wounds, lymphedema, cardiopulmonary conditions and OB/GYN conditions while being sensitive to ethnic and cultural issues and biases.
2. Identify the anatomical structures involved in the pathologies presented.
3. Describe appropriate surgical and non-surgical interventions as they apply to each presented diagnosis.
4. Describe and competently perform the treatment interventions and suggest modifications in response to the range of simulated patient outcomes as appropriate.
5. Describe the contraindications and precautions for each simulated diagnosis and intervention.
6. Identify and practice the requirements of universal precautions and Occupational Safety and Health Administration (OSHA) guidelines as they apply to physical therapy practice.
7. Use approved terminology in the documentation process of each simulated session of care.

**PTA 249 Orthopedic Interventions for the PTA (1.5)**

*Variable hours per week for a total of 22.5 lecture hours*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 249 may not be audited. PTA 249 may not be taken credit/no credit.*

PTA 249 presents the clinical testing, data collection and theory of therapeutic exercise as it applies to selected orthopedic pathologies at different stages of injury and healing. The conditions will include sprains, strains, hypermobile and hypomobile joints, overuse syndromes, common spinal diagnoses, fractures, arthritis, total joint replacements and neuromusculoskeletal surgical interventions. The rationale for orthopedic tests and the application of the treatment interventions for the selected conditions will include the safe and effective application of passive, assisted and active range of motion (ROM), isometric, concentric and eccentric exercise, progressive resisted exercise (PRE), plyometrics, neuromuscular facilitation / inhibition, aerobic and anaerobic exercise, endurance training, balance exercises and isokinetic exercise. The student will be required to apply these principles in the companion course, PTA 249L.

Upon successful completion of PTA 249, the student should be able to:

1. Identify and discuss the physiology, pathology, etiology, signs and symptoms that occur in the selected orthopedic conditions.
2. Competently explain the application of all appropriate physical therapy (PT) interventions and/or assessment skills for the selected orthopedic conditions within the guidelines of the ethical and legal practice standards.
3. Identify and explain the indications and contraindications for use of various types of therapeutic exercise during the three stages of healing of named orthopedic pathologies.
4. Analyze proposed exercise programs for the efficacy in obtaining the goals of treatment.
5. Describe the use of aqua-therapy as it applies to the orthopedic population.
6. Provide competent oral and written education to others, including patients, family members, caregivers and other healthcare providers as it applies to physical therapy interventions.
7. Identify and discuss the effects of chronic abnormal pathology and pain on the musculoskeletal system and the psychological well-being of patients.
8. Demonstrate appropriate assessment tools and collect data for the named orthopedic pathologies.
9. Describe ROM and stretching exercises, education of a home exercise program, PRE's, neuromuscular facilitation techniques, balance, endurance, and plyometrics interventions.
10. Justify functional activities to the rehabilitation of orthopedic conditions.
11. Use problem-solving and analytical thinking skills to modify exercise programs as they relate to observed simulated patient responses, conditions presented, and the goals of treatment.
12. Correctly identify and discuss major bony landmarks and musculoskeletal structures, end feel, resting length, stretch, normal ROM, strength, power and endurance as they apply to the exercise programs presented.
13. Document accurately in Subjective, Objective, Assessment and Plan (SOAP) note form the simulated PT intervention session.

14. Identify and integrate appropriate evidence-based resources to support clinical decision-making for progression of the patient within the plan of care established by the physical therapist.

**PTA 249L Orthopedic Interventions for the PTA Lab (1.5)**

*Variable hours per week for a total of 67.5 lab hours*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapy Assistant program **or** consent of PTA Program Director.*

*Comment: Letter grade only. PTA 249L may not be audited. PTA 249L may not be taken credit/no credit.*

PTA 249L presents the clinical testing, data collection and application of therapeutic exercise as it applies to selected orthopedic pathologies at different stages of injury and healing. The conditions will include sprains, strains, hypermobile and hypomobile joints, overuse syndromes, common spinal diagnoses, fractures, arthritis, total joint replacements and neuromusculoskeletal surgical interventions. The rationale for orthopedic tests and the application of the treatment interventions for the selected conditions will include the safe and effective application of passive, assisted and active range of motion (ROM), isometric, concentric and eccentric exercise, progressive resisted exercise (PRE), plyometrics, neuromuscular facilitation / inhibition, aerobic and anaerobic exercise, endurance training, balance exercises and isokinetic exercise. Use of lab simulation and role playing of actual clinical situations allow the student to demonstrate knowledge and skills to problem solve, think analytically, perform tests, select and/or modify exercise programs as they relate to the conditions presented and the observed physiologic responses. The use of appropriate communication skills, American Physical Therapy Association (APTA) terminology and documentation, and the ability to progress exercise programs within the plan of care will be emphasized.

Upon successful completion of PTA 249L, the student should be able to:

1. Identify and discuss the physiology, pathology, etiology, signs and symptoms that occur in the selected orthopedic conditions.
2. Competently perform and explain the application of all appropriate physical therapy (PT) interventions and/or assessment skills for the selected orthopedic conditions within the guidelines of the ethical and legal practice standards.
3. Identify and explain the indications and contraindications for use of various types of therapeutic exercise during the three stages of healing of named orthopedic pathologies.
4. Analyze and implement proposed exercise programs for the efficacy in obtaining the goals of treatment.
5. Describe the use of aqua-therapy as it applies to the orthopedic population.
6. Provide competent oral and written education to others, including patients, family members, caregivers and other healthcare providers as it applies to physical therapy interventions.
7. Identify and discuss the effects of chronic abnormal pathology and pain on the musculoskeletal system and the psychological well-being of patients.



8. Demonstrate appropriate assessment tools and collect data for the named orthopedic pathologies.
9. Demonstrate ROM and stretching exercises, education of a home exercise program, PRE's, neuromuscular facilitation techniques, balance, endurance, and plyometrics to simulated orthopedic pathologies.
10. Demonstrate and justify trunk stabilization, posture, back exercises and ergonomics as they apply to common back conditions.
11. Demonstrate and justify functional activities to the rehabilitation of orthopedic conditions.
12. Use problem-solving and analytical thinking skills to modify exercise programs as they relate to observed simulated patient responses, conditions presented, and the goals of treatment.
13. Correctly identify and discuss major bony landmarks and musculoskeletal structures, end feel, resting length, stretch, normal ROM, strength, power and endurance as they apply to the exercise programs presented.
14. Document accurately in Subjective, Objective, Assessment and Plan (SOAP) note form the simulated PT intervention session.
15. Identify and integrate appropriate evidence-based resources to support clinical decision-making for progression of the patient within the plan of care established by the physical therapist.

### **PTA 251 Professional Issues III: Employment (1)**

*1 hour lecture per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director; **and** a grade of "C" or higher in PTA 231.*

*Comment: Letter grade only. PTA 251 may not be audited. PTA 251 may not be taken credit/no credit.*

PTA 251 is designed to develop a student's participation and commitment to the profession of physical therapy. It investigates the opportunities and responsibilities of an employee in the health care delivery system through activities of résumé preparation, mock job interviews, legislative testimonies, attending professional and government meetings and participating in the Hawai'i Chapter of the American Physical Therapy Association (HAPTA). This course emphasizes life long learning, the practice of ethics and legality, and the American Physical Therapy (APTA) core values. Finalization of an electronic portfolio will be emphasized for transfer to the APTA website.

Upon successful completion of PTA 251, the student should be able to:

1. Identify individual and cultural differences and respond ethically in all aspects of physical therapy services.
2. Discuss the relationships of government agencies to health care delivery, billing and reimbursement issues and aspects of planning and operating PT services.

3. Demonstrate conduct and responsibility that reflect the APTA Guide to Physical Therapy Practice, practice standards that are legal, ethical, and safe and a commitment to the profession of physical therapy and meet the expectations of consumers receiving health care services.
4. Advocate for the role of physical therapy and the scope of PTA practice.
5. Discuss the scope of practice between the various rehabilitation services.
6. Prepare a résumé and role-play an employment interview.
7. Identify Occupational Safety and Health Administration (OSHA) regulations.
8. Read, locate and interpret health care literature, documents, Internet information, the APTA code of conduct, APTA core values, APTA website of information for standardized practice and individual state practice acts for physical therapy.
9. Provide examples and role-play personal responsibility for career development, patient advocacy, life-long learning, membership in the professional association and the involvement in legislative issues.
10. Produce an electronic portfolio.

#### **PTA 262 Clinical Internship III (4)**

*A total of 200 hours clinical practice, 3 hours lecture per semester*

*Prerequisites: Admission to the Physical Therapist Assistant program **or** a grade of “C” or higher in PTA 252 **or** consent of PTA*

*Program Director.*

*Comment: PTA 262 is offered in the last semester of the PTA program. Letter grade only. PTA 262 may not be taken credit/no credit.*

*PTA 262 may not be audited. PTA 262 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately \$50.00.*

PTA 262 is the penultimate clinical experience designed to apply previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the assigned clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills of the assigned clinical setting to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are refined to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 262, the student should be able to:

1. Perform safe and effective physical therapy services as specified in the plan of treatment designed by the supervising physical therapist (PT). Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills. Students are expected to have an independent case load of 1 patient per hour.
2. Recognize normal and abnormal reactions to treatment interventions and report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include range of motion, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and Activities of Daily Living to assist PT in their evaluation process.
4. Communicate with the supervising Physical Therapist (PT) the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Provide competent oral and written education to patients, family, significant other, and other health care providers as it applies to physical therapy interventions.
6. Identify individual and cultural differences and respond appropriately in all aspects of physical therapy services.
7. Practice the professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.
8. Follow the Occupational Safety and Health Administration (OSHA) regulations and universal precautions.
9. Use appropriate body mechanics 100% of the time in the application of treatment procedures to assure safety of both the patient and the student.
10. Achieve analog scores of 85- 90% or higher competence on the current PTA clinical performance assessment forms and treatment skills expectations of the clinical setting, program and college.
11. Apply appropriate physical therapy documentation procedures.
12. Practice confidentiality concerning patient and clinic information applying Health Insurance Portability and Accountability Act (HIPAA) standards.
13. Participate in clerical and reception duties as needed.
14. Perform as a PTA in clinical practice and conduct that reflects the American Physical Therapy Association (APTA) code of ethics, PTA algorithm and practice standards.
15. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.

**PTA 263 Clinical Internship IV (4)**

*A total of 200 hours clinical practice, 3 hours lecture per semester*

*Prerequisite(s): Admission to the Physical Therapist Assistant program **or** a grade of "C" or higher in PTA 262 **or** consent of PTA*

*Program Director.*

*Comment: PTA 263 is offered in the last semester of the PTA program. Letter grade only.  
PTA 263 may not be taken credit/no credit.*

*PTA 263 may not be audited. PTA 263 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately \$50.00.*

PTA 263 is the capstone clinical experience designed to apply all previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are advanced to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 263, the student should be able to:

1. Independently execute safe and effective physical therapy services as specified in the plan of treatment designed by the supervising physical therapist. Services will include the appropriately selected physical agents, procedures, data collection and interpersonal skills. Students are expected to have a case load equivalent to the assigned facilities productivity standards.
2. Recognize normal and abnormal reactions to treatment interventions and report to supervising physical therapist and suggest alternative interventions.
3. Accurately collect data which may include range of motion, muscle strength, muscle length, limb length, girth, wound measurement and grade, respiratory status, circulatory condition, functional activities and Activities of Daily Living to assist physical therapist in their evaluation process.
4. Clearly confer with the supervising Physical Therapist (PT) the physiological disease process, anatomy and kinesiology in the patient population seen, as it applies to physical therapy interventions.
5. Execute competent oral and written education to patients, family, significant other, and other health care providers as it applies to physical therapy interventions.
6. Recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services.
7. Practice the professional behaviors that reflect a commitment to the patients, community and growth of the profession of physical therapy.
8. Abide by the Occupational Safety and Health (OSHA) regulations and universal precautions.
9. Use appropriate body mechanics 100% of the time in the application of treatment procedures to assure safety of both the patient and the student.
10. Achieve analog scores of 90% or higher competence on the current PTA clinical performance assessment forms and treatment skills expectations of the clinical

- setting, program and college.
11. Execute appropriate physical therapy documentation procedures.
  12. Practice confidentiality concerning patient and clinic information applying Health Insurance Portability and Accountability Act (HIPAA) standards.
  13. Perform clerical and reception duties as needed.
  14. Function as a PTA in clinical practice and conduct that reflects the American Physical Therapy Association (APTA) code of ethics, PTA algorithm and practice standards.
  15. Use approved terminology from the APTA Guide to Physical Therapy Practice and APTA Resource Guide.
  16. Apply for PTA occupation positions in any physical therapy clinical setting.
  17. Successfully qualify for the National PTA licensing exam.

### **PTA 265 Electrotherapy (1)**

*1.5 hours lecture per week for 10 weeks*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.*

*Corequisite(s): PTA 265L.*

*Comment: Letter grade only. PTA 265 may not be audited. PTA 265 may not be taken credit/no credit.*

PTA 265 presents the production, physiological effects, indications, contraindications and applications of various therapeutic electrical interventions. Appropriate parameters for the treatment of pain, muscle weakness, edema, wounds, or introduction of medication or monitoring of muscle activity will be included. A review of mechanisms of trauma and healing along with the physiology of pain and its measurement will be covered. Students are required to use APTA approved terminology as it applies to diagnosis, pathologies, signs & symptoms as well as different equipment components and parameters.

Upon successful completion of PTA 265, the student should be able to:

1. Identify the principles and production of named therapeutic electrical currents.
2. Describe the waveforms, frequencies and terminology applied to the major therapeutic electrical currents, such as Interferential, Premodulated, High Volt galvanic, Microcurrent, Alternating current, Direct current, Iontophoresis and Biofeedback.
3. Recall the indications, contraindications and precautions of the currents presented.
4. Describe the normal and abnormal physiological responses of the tissues to various electrical currents.
5. Describe the physical and emotional effects of chronic pain and disease process on the patients.
6. Identify possible emotional responses of the patients to various electrical currents.
7. Identify diagnosis appropriate for treatment with electrical currents and the signs/symptoms that are commonly associated with these diagnoses.
8. Describe the appropriate electrical treatment options for named diagnosis and symptoms such as pain, wounds, muscle atrophy, inflammation and joint stiffness.

9. Demonstrate an understanding of safety measures as they apply to electrical applications.
10. Demonstrate an understanding of OSHA regulations and Universal precautions as they apply to electrical modalities
11. Use approved terminology from the APTA: Guide to PT Practice and APTA: Electrotherapy Terminology in Physical Therapy.

**PTA 265L Electrotherapy Lab (1)**

*4.5 hours lab per week for 10 weeks*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **or** consent of PTA Program Director.*

*Corequisite(s): PTA 265.*

*Comment: Letter grade only. PTA 265L may not be audited. PTA 265L may not be taken credit/no credit.*

PTA 265L implements the clinical application of various electrotherapy modalities. By using lab simulation and role playing of actual clinical situations the students will use information from the PTA 265 lecture to problem solve, think analytically and modify parameters as it relates to observed responses and conditions presented. The application of treatment procedures as set out in the mock treatment plans will require the use of appropriate communication skills. Approved terminology from the APTA: Guide to Physical Therapy Practice and the APTA: Electrotherapeutic Terminology in Physical Therapy will be required for documentation of treatment parameters and patient reaction to applied electrical interventions.

Upon successful completion of PTA 265L, the student should be able to:

1. Demonstrate competency in the presented electrical modalities as laid out in the Mastery Assessment Clinical Skills Manual (MAC), Skill sheets and APTA: Guide to PT practice. The listed modalities may be indicated in the treatment of pain, edema, acute trauma, peripheral vascular disease, wound healing, reduction of muscle spasm and spasticity.
2. The presented electrical modalities may include: Transcutaneous electrical nerve stimulation, microcurrent electrical nerve stimulation, high volt galvanic, interferential, russian, neuromuscular electrical stimulation, Functional electrical nerve stimulation, iontophoresis, surface Electromyography (Biofeedback), ultrasound/Electrical stimulation combinations.
3. Demonstrate an understanding of the safety factors, indications, contraindications and precautions as they apply to the presented modalities.
4. Identify and locate bony landmarks and the musculoskeletal structures that can be affected by the application of electrical current.
5. Demonstrate patient positioning, draping and comfort as it addresses the treatment goals and the treatment plan.
6. Demonstrate the ability to problem solve, think analytically and modify parameters as they relate to observed patient responses and conditions presented.
7. Describe the physiological effects of the applied electrical modality.

8. Demonstrate an ability to explain electrical treatments to patient and families in an understandable and acceptable manner.
9. Demonstrate and effectively teach the use of independent electrotherapy equipment for use in the patient's home situation.
10. Document accurately in SOAP note form, the patient positioning, equipment.
11. Use approved terminology from the APTA: Guide to PT Practice.

### **PTA 275 Pediatrics for the Physical Therapist Assistant (1)**

*2 hours lecture/lab per week*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program or consent of PTA Program Director.*

*Comment: Letter grade only. PTA 275 may not be audited. PTA 275 may not be taken credit/no credit. Transportation is required for clinic visits.*

PTA 275 will provide students with the basic theories and therapeutic skills to deliver pediatric services with entry-level competence. Course content will include characteristics of disabilities in children including the role of the physical therapist assistant in a variety of settings. Case stories of children and families will illustrate course concepts and will also address the broader implications of the disability on the child, family, and community. Collaborative models of providing services will be explored including the provision of services in educational settings. Values that will be promoted throughout the course include a) family-centered care, b) cultural sensitivity, c) age-appropriate activities, d) functional skills, and e) collaborative teamwork.

Upon successful completion of PTA 275, the student should be able to:

1. Identify and practice ways to provide effective education to families and caregivers of children with disabilities.
2. Describe methods to provide physical therapy services that are culturally sensitive.
3. Describe the continuum of services available to children and the families in Hawai'i.
4. Identify and role-play as team members in different service delivery systems and settings to children.
5. Describe the normal developmental process including age-appropriate play activities for young children.
6. Recognize and demonstrate normal and abnormal gross and fine motor development including normal postural movements, reflexes, and motor milestones.
7. Describe common genetic and neurological disabilities in children.
8. Identify abnormal movement and reflexes in children with neurological disorders.
9. Mimic and facilitate appropriate posture and movement for children with abnormal muscle tone and reflexes.
10. Link functional skills for children with a variety of disabilities.
11. Perform therapeutic interventions for common pediatric orthopedic, pediatric pulmonary disorders and spinal abnormalities.

12. Describe ways to support children with chronic and/or life-threatening illnesses.
13. Recall the potential risks of alcohol, drugs, and bloodborne pathogen infections on development.
14. Describe and create assistive technology devices that can support children with disabilities to be included in home, school, and community activities.

**PTA 282 Clinical Internship I (3.5)**

*A total of at least 157.5 hours of clinical experience per semester*

*Prerequisite(s): Acceptance into the Associate in Science degree in Physical Therapist Assistant program **and** a grade of “C” or higher in PTA 210.*

*Comment: Letter grade only. PTA 282 may not be audited. PTA 282 may not be taken credit/no credit.*

PTA 282 integrates the clinical and didactic experiences by further developing the students problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Knowledge and skills gained in prerequisite and corequisite courses are applied to therapeutic interventions that address the goals of treatment and the plan of care as set up by the supervising physical therapist. Clinical sites may include outpatient orthopedics, acute care, home care, pediatrics, school health and long term care.

Upon successful completion of PTA 282, the student should be able to:

1. Participate in professional and community organizations and available opportunities for volunteerism, advocacy, and leadership.
2. Review health records (i.e., lab values, diagnostic tests, specialty reports, narrative, consults, and physical therapy documentation) prior to carrying out the PT plan of care.
3. Identify legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
4. Describe duties in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.
5. Describe duties in a manner consistent with APTA’s Values-Based Behaviors for the Physical Therapist Assistant.
6. Discuss an ethical situation and develop a plan of action that demonstrates sound moral reasoning congruent with core professional ethics and values.
7. Interview patients/clients, caregivers, and family members to obtain current information related to prior and current level of function and general health status (i.e. fatigue, fever, malaise, unexplained weight change).
8. Report any changes in patient/client status or progress to the supervision physical therapist.

**PTA 283 Clinical Internship II (4.5)**

*A minimum of 202.5 hours clinical practice*



*Prerequisite(s): Admission to the Physical Therapist Assistant program **or** a grade of “C” or higher in PTA 282 **or** consent of PTA Program Director.*

*Comment: PTA 283 is offered in the last semester of the PTA program. Letter grade only. PTA 283 may not be taken credit/no credit. PTA 283 may not be audited. PTA 283 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately \$50.00.*

PTA 283 is the penultimate clinical experience designed to apply previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the assigned clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills of the assigned clinical setting to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are refined to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 283, the student should be able to:

1. Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.
2. Recognize and report suspected cases of abuse of vulnerable populations to the appropriate authority.
3. Recognize and report suspected cases of fraud and abuse related to the utilization of and payment for physical therapy and other health care services to the appropriate authority.
4. Perform clinical responsibilities in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.
5. Review and discuss duties in a manner consistent with APTA’s Values-Based Behaviors for the Physical Therapist Assistant.
6. Implement, in response to an ethical situation, a plan of action that demonstrates sound moral reasoning congruent with core professional ethics and values.
7. Communicate effectively with stakeholders including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policy makers.
8. Recognize and respond with consideration for patients’/clients’ differences, values, preferences, and expressed needs in all work-related activities.
9. Apply current knowledge, theory, and clinical judgment while considering the patient/client perspective and the environment, based on the plan of care by the physical therapist.
10. Identify and integrate appropriate evidence-based resources to support clinical decision-making for progression of the patient within the plan of care established by the physical therapist.
11. Effectively educate others using teaching methods that commensurate with the needs of patient, caregiver or healthcare personnel.  
Interview patients/clients, caregivers, and family members to obtain current

- information related to prior and current level of function and general health status (i.e., fatigue, fever, malaise, unexplained weight change).
12. Review health records (i.e., lab values, diagnostic tests, specialty reports, narrative, consults, and physical therapy documentation) prior to carrying out the PT plan of care.
  13. Report any changes in patient/client status or progress to the supervising physical therapist.
  14. Determine when an intervention should not be performed due to clinical indications or when the direction to perform the intervention is beyond that which is appropriate for the physical therapist assistant.
  15. Contribute to the discontinuation of episode of care planning and follow-up processes as directed by the supervising physical therapist.
  16. Complete documentation that follows professional guidelines, guidelines required by health care systems, and guidelines by the practice setting.
  17. Respond effectively to patient/client and environmental emergencies in the clinical setting.
  18. Contribute to efforts to increase patient and healthcare provider safety.
  19. Participate in the provision of patient-centered interprofessional collaborative care.
  20. Participate in performance improvement activities (quality assurance).
  21. Provide accurate and timely information required for billing and payment purposes.

### **PTA 284 Clinical Internship III (4.5)**

*A minimum of 202.5 hours clinical practice*

*Prerequisite(s): Admission to the Physical Therapist Assistant program **or** a grade of "C" or higher in PTA 283 **or** consent of PTA Program Director.*

*Comment: PTA 284 is offered in the last semester of the PTA program. Letter grade only. PTA 284 may not be taken credit/no credit. PTA 284 may not be audited. PTA 284 may not be repeated for credit. Students must purchase the uniform and program name tag for approximately \$50.00.*

PTA 284 is the capstone clinical experience designed to apply all previous clinical and didactic experiences using problem-solving, critical thinking and interpersonal skills in the clinical setting under the direction of qualified clinical instructors. Students will function at entry level career skills to graduate as a PTA. Previous clinical experiences and successful completion of PTA course work and skills are advanced to the entry-level status in preparation for entering the workforce and qualifying for the PTA Licensing Exam. Clinical internship may include outpatient orthopedics, acute care, home care, pediatrics, school health and skilled nursing facilities.

Upon successful completion of PTA 284, the student should be able to:

1. Adhere to legal practice standards, including all federal, state, and institutional regulations related to patient/client care and fiscal management.

2. Recognize and report suspected cases of abuse of vulnerable populations to the appropriate authority.
3. Recognize and report suspected cases of fraud and abuse related to the utilization of and payment for physical therapy and other health care services to the appropriate authority.
4. Review and discuss clinical duties in a manner consistent with the Guide for Conduct of the Physical Therapist Assistant (APTA) and Standards of Ethical Conduct to meet the expectations of patients, members of the physical therapy profession, and other providers as necessary.  
Review and discuss clinical duties in a manner consistent with APTA's Values-Based Behaviors for the Physical Therapist Assistant.
5. Implement, in response to an ethical situation, a plan of action that demonstrates sound moral reasoning congruent with core professional ethics and values.
6. Communicate and discuss effectively with stakeholders including patients/clients, family members, caregivers, practitioners, interprofessional team members, consumers, payers, and policy makers.
7. Recognize and respond with consideration for patients'/clients' differences, values, preferences, and expressed needs in all work-related activities.
8. Apply current knowledge, theory, and clinical judgment while considering the patient/client perspective and the environment, based on the plan of care by the physical therapist.
9. Identify and integrate appropriate evidence-based resources to support clinical decision-making for the progression of the patient within the plan of care established by the physical therapist.
10. Effectively educate others using teaching methods that commensurate with the needs of patient, caregiver or healthcare personnel.
11. Interview patients/clients, caregivers, and family members to obtain current information related to prior and current level of function and general health status (i.e., fatigue, fever, malaise, unexplained weight change).
12. Review health records (i.e., lab values, diagnostic tests, specialty reports, narrative, consults, and physical therapy documentation) prior to carrying out the PT plan of care.
13. Report any changes in patient/client status or progress to the supervising physical therapist.
14. Determine when an intervention should not be performed due to clinical indications or when the direction to perform the intervention is beyond that which is appropriate for the physical therapist assistant.
15. Contribute to the discontinuation of episode of care planning and follow-up processes as directed by the supervising physical therapist.
16. Complete documentation that follows professional guidelines, guidelines required by health care systems, and guidelines by the practice setting.
17. Respond effectively to patient/client and environmental emergencies in the clinical setting.
18. Contribute to efforts to increase patient and healthcare provider safety.
19. Participate in the provision of patient-centered interprofessional collaborative care.

20. Participate in performance improvement activities (quality assurance).
21. Describe aspects of organizational planning and operation of the physical therapy service.
22. Describe accurate and timely information for billing and payment purposes.

## **PHYSICS**

### **PHYS 100 Survey of Physics (3) KCC AA/DP and KCC AA/NS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for MATH 103 or higher level courses in the same area/field (or areas/fields) of study*

*Comment: Registration in PHYS 100L is optional.*

PHYS 100 is an introduction to physics basic concepts.

Upon successful completion of PHYS 100, the student should be able to:

1. Identify and define the associations and relationships of the topics treated in the course.
2. Utilize elementary abstract thinking and analytical reasoning.
3. Identify mathematical proportionality in physical principles.

### **PHYS 100L Survey of Physics Laboratory (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in PHYS 100.*

PHYS 100L focuses on simple experiments in basic concepts of physics.

Upon successful completion of PHYS 100L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. Record, analyze, and extract information from data acquired and write a laboratory report.
3. Make conclusions and formulate insights into the subjects of the laboratory projects.

### **PHYS 151 College Physics I (3) KCC AA/DP and KCC AS/NS**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in MATH 140.*

PHYS 151 is the first course in a two semester sequence of an introductory algebra/trigonometry-based physics courses. The course focuses on the principles,

theories and problem solving in motion, mechanical energy, waves, heat and thermodynamics.

Upon successful completion of PHYS 152, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge of and skills of motion, energy, wave theory, and thermodynamics.
2. Identify and explain the concepts and principles related to the kinematics and dynamics of motion, energy, wave theory, and thermodynamics.
3. Identify and define the associations and relationships of the topics treated in the course.
4. Utilize abstract thinking and analytical reasoning in the analysis and solution of word problems.
5. Distinguish and define the mathematical proportionality in physical principles.
6. Utilize calculation techniques with mathematically formulated principles.
7. Identify and assess quantitative information in terms of physical principles.

### **PHYS 151L College Physics Laboratory I (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): A grade of "C" or higher or concurrent enrollment in PHYS 151.*

PHYS 151L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in the kinematics and dynamics of motion, heat and thermodynamics. The course emphasis is on measurement techniques and analysis of data.

Upon successful completion of PHYS 151L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. State and identify the interaction between theory and experiments.
3. Design procedures for acquiring information from experimentation.
4. Record, analyze, and extract information from data acquired.
5. Make quantitative determination with formulations.
6. Write a technical report.

### **PHYS 152 College Physics II (3) KCC AA/DP**

*3 hours lecture per week*

*Prerequisite(s): PHYS 151.*

PHYS 152 is the second course in a two semester sequence of an introductory algebra/trigonometry based physics courses. PHYS 152 focuses on the principles, theories and problem solving in electricity, magnetism, light, relativity theory, quantum, atomic, and nuclear reactions.

Upon successful completion of PHYS 152, the student should be able to:

1. Solve problems to demonstrate knowledge of and skills of electricity, magnetism, light, relativity theory, quantum, atomic and nuclear reactions.
2. Explain the concepts and principles related to electricity, magnetism, light, relativity theory, quantum, atomic and nuclear reactions.
3. Utilize calculation techniques with mathematically formulated principles.

**PHYS 152L College Physics Laboratory II (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in PHYS 152.*

PHYS 152L provides the students hands-on experience in the experimental analysis, physical observation and measurements in electricity, magnetism and geometric optics. The course emphasis is on measurement techniques and analysis of data.

Upon successful completion of PHYS 152L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. Design procedures for acquiring information from experimentation.
3. Record, analyze, and extract information from data acquired and write a technical report.

**PHYS 170 General Physics I (4) KCC AA/DP**

*4 hours lecture per week*

*Prerequisite(s): Credit or concurrent enrollment in MATH 242.*

*Recommended Preparation: PHYS 100; and MATH 231 or MATH 243.*

PHYS 170 is the first semester of an introductory calculus-based course. The course will provide the students a comprehensive introduction to the principles and theories of the mechanics of particles, rigid bodies and fluids, wave motion, thermodynamics and kinetic theory.

Upon successful completion of PHYS 170, the student should be able to:

1. Identify and employ the concepts and principles related to the kinematics and mechanics of particles and rigid bodies, fluids, and wave motion to solve applications and problems.
2. Utilize abstract thinking and analytical reasoning in the analysis and solution of physical phenomena.
3. Utilize mathematical techniques to model fundamental principles and their relationships, and to predict observable outcomes of physical phenomena.

**PHYS 170L General Physics Lab I (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): A grade of "C" or higher or concurrent enrollment in PHYS 170.*

PHYS 170L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in kinematics and mechanics of rigid bodies, fluids, and wave motion. The course emphasis is on error analysis, measurement techniques, and report writing.

Upon successful completion of PHYS 170L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypotheses.
2. Record, analyze, and extract information from acquired data in order to deduce quantitative determinations and conclusions into the subjects of the laboratory projects.
3. Make quantitative determinations with formulations.
4. Write a laboratory report.

### **PHYS 272 General Physics II (3) KCC AA/DP**

*3 hours lecture per week*

*Prerequisite(s): MATH 206 or MATH 242; and PHYS 170 and PHYS 170L.*

PHYS 272 is the second course in a two-semester sequence of an introductory calculus-based course. The course is a comprehensive introduction to the principles and theories of electricity, magnetism and geometric optics.

Upon successful completion of PHYS 272, the student should be able to:

1. Give examples of applications and solve problems to demonstrate knowledge and skills of electricity, magnetism and geometric optics.
2. Identify and explain the concepts and principles related to electricity, magnetism and geometric optics.
3. Identify and use mathematical techniques in the explanation of physical phenomena.

### **PHYS 272L General Physics Lab II (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): PHYS 170 and PHYS 170L and credit or concurrent enrollment in PHYS 272.*

PHYS 272L is designed to provide the students a hands-on experience in the experimental analysis, physical observation and measurements in electricity, magnetism and geometric optics. The course emphasis is on error analysis, measurement techniques, and report writing.

Upon successful completion of PHYS 272L, the student should be able to:

1. Use laboratory techniques and instruments to apply the scientific method to test hypothesis.
2. Design procedures for acquiring information from experimentation.
3. Record, analyze, and extract information from data acquired and write a technical report.

### **PHYS 274 General Physics III (3) KCC AA/DP**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PHYS 272; **and** credit in MATH 231 or credit or concurrent enrollment in MATH 243.*

PHYS 274 focuses on the study of special relativity, quantum mechanics, solid-state physics, and high energy physics.

Upon successful completion of PHYS 274, the student should be able to:

1. Demonstrate knowledge of the wave properties of light, special relativity, quantum mechanics, nucleus structure, elementary particles and fundamental forces of nature.
2. Utilize abstract thinking and analytical reasoning in the analysis of word problems.
3. Utilize calculation techniques in the analysis of dynamics problems in modern physics.

## **PHYSIOLOGY**

### **PHYL 141 Human Anatomy and Physiology I (3) KCC AA/DB and KCC AS/NS**

*3 hours lecture per week*

*Recommended Preparation: CHEM 100 or a higher-level chemistry course or a higher-level biochemistry course; **and** BIOL 101 or a higher-level biology course or a higher-level zoology course.*

PHYL 141, Human Anatomy and Physiology I covers the structure and function of the human body which includes a study of its embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: body orientation, chemical level, cellular level, tissue level, integumentary, bone tissue, skeletal, joints, muscular tissue, muscular system, nervous tissue, spinal cord & nerves, brain, cranial nerves, neural integration and special senses.

Upon successful completion of PHYL 141, the student should be able to:

1. Recall the required anatomical structures of the body systems covered in the course.
2. Recall the required physiological functions of the body systems covered in the



course.

**PHYL 141L Human Anatomy and Physiology Lab I (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in PHYL 141 or credit in ZOOL 141.*

*Recommended Preparation: CHEM 100 or a higher-level chemistry course or a higher-level biochemistry course; and BIOL 101 or a higher-level biology course or a higher-level zoology course.*

PHYL 141L Human Anatomy and Physiology Laboratory I covers the structure and function of the human body, which includes study and experimentation regarding embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: body orientation, chemistry, cells, tissues, integumentary system, bone tissue, skeletal system, joints, muscular tissue, muscular system, nervous tissue, spinal cord and nerves, brain, cranial nerves, and special senses.

Upon successful completion of PHYL 141L, the student should be able to:

1. Describe general human gross, systemic, histological, and cellular anatomy through the use of models, computer images, palpation, observation, and dissections.
2. Use basic chemical principles important to operations of the body.
3. Identify the functions of the various parts of a microscope.
4. Employ the scientific method to study, measure, analyze, understand, and report on physiological systems.
5. Use a range of technological instruments/computers to measure and analyze physiological systems.
6. Perform clinical tests to assess the condition of physiological systems.

**PHYL 142 Human Anatomy and Physiology II (3) KCC AA/DB and KCC AS/NS**

*3 hours lecture per week*

*Prerequisite(s): PHYL 141 or ZOOL 141.*

*Recommended Preparation: CHEM 100 or a higher-level chemistry course or a higher-level biochemistry course; and BIOL 101 or a higher-level biology course or a higher-level zoology course.*

PHYL 142 covers the structure and function of the human body, which includes a study of its embryology, gross anatomy, microanatomy, physiology, pathology, and homeostatic relationships with regards to the following areas: autonomic nervous, endocrine, blood, heart, vessels and hemodynamics, lymphatic and immune, respiratory, digestive, metabolism, urinary, fluids, electrolytes, acid/base homeostasis, reproductive, development and heredity.

Upon successful completion of PHYL 142, the student should be able to:

1. Recall the required anatomical structures and physiological functions of the following body systems: autonomic nervous, endocrine, blood, heart, vessels and hemodynamics, lymphatic and immune, respiratory, digestive, metabolism, urinary, fluids, electrolytes, acid/base homeostasis, reproductive, development and heredity.

**PHYL 142L Human Anatomy and Physiology Lab II (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in PHYL 142 or credit in ZOOL 142.*

*Recommended Preparation: CHEM 100 or a higher-level chemistry course or a higher-level biochemistry course; and BIOL 101 or a higher-level biology course or a higher-level zoology course.*

PHYL 142L focuses on the study of the structure and function of the human body which includes examination and experimentation regarding embryology, gross anatomy, microanatomy (histology), physiology, pathology, and homeostatic relationships with regards to the following areas: autonomic nervous, endocrine, blood, heart, vessels & hemodynamics, lymphatic & immune, respiratory, digestive, metabolism and nutrition and body composition (energy balance), urinary, fluids, electrolytes, acid/base homeostasis, reproductive, development and heredity.

Upon successful completion of PHYL 142L, the student should be able to:

1. Describe general human gross, systemic, histological, and cellular anatomy through the use of models, computer images, palpation, observation, and dissections.
2. Use basic chemical principles important to operations of the body.
3. Use a microscope to identify cells of the body.
4. Employ the scientific method to study, measure, analyze, understand, and report on physiological systems.
5. Use a range of technological instruments/computers to measure and analyze physiological systems.
6. Perform clinical tests to assess the condition of physical and physiological systems.
7. Employ critical thinking and knowledge of common mechanisms of physiological operation to understand how systems function and homeostasis.

**PHYL 160 The Science of Sleep (3) KCC AA/DB and KCC AS/NS**

*3 hours lecture per week*

*Comment: PHYL 160 may not be audited.*

PHYL 160 is an investigation into the science of healthy and disordered sleep; dream interpretation and its significance in diverse cultures; and animals' adaptations for sleep. Students consider the relationship between sleep and politics in the context of the Hawai'i cultural revitalization. Civic responsibility is emphasized through guided actions related

to sleep wellness and sleep debt. Students receive a zero-cost open educational resource textbook that includes indigenized and localized content, as well as social justice prompts, in each chapter. Sustainability activities are included to support the course's sustainability designation.

Upon successful completion of PHYL 160, the student should be able to:

1. Describe the essentials of healthy sleep.
2. Explain the significance of dreams.
3. Relate the politics of sleep to the Hawai'i cultural revitalization.
4. Demonstrate civic engagement through sleep education for impact in the community.
5. Engage community members in a sustainability conversation.

### **PHYL 160L The Science of Sleep Laboratory (1) KCC AA/DY**

*3 hours lab per week*

*Prerequisite(s): Credit or concurrent enrollment in PHYL 160.*

*Comment: Letter grade only. PHYL 160L may not be audited. PHYL 160L may not be taken credit/no credit.*

PHYL 160L provides guidance to students as they critically review scientific literature and work directly with librarians; design and conduct sleep science experiments; and share their research project results. Students examine how indigenous ways of knowing impact the scientific process and incorporate these values into their experimental design.

Upon successful completion of PHYL 160L, the student should be able to:

1. Discuss how indigenous ways of knowing impact science and problem solving.
2. Critically review scientific literature.
3. Design and conduct an experiment.
4. Report results from their own experiment.

## **POLITICAL SCIENCE**

### **POLS 110 Introduction to Political Science (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 **and** qualification for MATH 82.*

POLS 110 is an introduction to the scope of political science, approaches to the discipline, its methods, tools, problems and processes.

Upon successful completion of POLS 110, the student should be able to:

1. Demonstrate an appreciation and interest in politics.
2. Acquire the necessary political skills to cope with political life.

3. Develop a political perspective, which one may apply to contemporary social problems and institutions.
4. Show the beginnings of a worldview and sensitivity to political and socio-economic events in other parts of the world.
5. Show a personal growth, which reflects a sharpened sense of one's own values in relation to political issues.

**POLS 120 Introduction to World Politics (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 and qualification for MATH 82.*

POLS 120 is designed to introduce students to the political, cultural, social, and economic forces shaping the new global order. As nations become more interdependent, it is important that citizens of all countries better understand one another. In the 21st century everyone will find themselves involved in some aspect of the global system. If students wish to compete in this new global system, they must be aware of international events that will shape the policies of the nation and will impact on their future.

Upon successful completion of POLS 120, the student should be able to:

1. Identify the relationships between nation-states and the development of the international political order.
2. Define the role of international organizations and laws.
3. Analyze the different modes of conflict resolution.
4. Apply knowledge of foreign strategic and economic policy to analyzing current events.
5. Evaluate politics of Europe, Middle East, Asia, Africa and the Americas.

**POLS 130 Introduction to American Politics (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 and qualification for MATH 82.*

POLS 130 focuses on American political processes and institutions as seen through alternate interpretations.

Upon completion of POLS 130, the student should be able to:

1. Weigh critically the political alternatives and develop a sense of political efficacy and identity.
2. Perceive the linkages between the political, economic, and social areas.
3. Analyze current American political problems and propose possible solutions.
4. Demonstrate a systems oriented approach to study political life in America.
5. Propose viable political alternatives and strategies for change.
6. Apply basic research skills to social sciences.

**POLS 207 Politics of the Middle East (3) KCC AA/DS Spring**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 **and** qualification for MATH 82.*

*Comment: Letter grade only. POLS 207 may not be audited. POLS may not be taken credit/no credit. POLS 207 is offered in the Spring semester only.*

POLS 207 is designed to give students a basic awareness of the politics of the Middle East so they can have a greater appreciation of its importance to the stability of the United States and the global system.

Upon successful completion of POLS 207, the student should be able to:

1. Explain Islam and its role in the global system.
2. Describe the history, politics and culture of the Middle East.
3. Explain the major issues relating to the Middle East including oil, the Palestinian issue and Islamic fundamentalism.
4. Probe the problems and issues facing transitional societies.
5. Measure the impact of the Middle East on the stability and security of the American political, economic, and social system.

**PSYCHOLOGY**

**PSY 100 Survey of Psychology (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 **or** qualification for ESL100; **and** qualification for MATH 82 **or** qualification for a higher-level mathematics course.*

PSY 100 focuses on basic concepts and principles of psychology in the areas of individual differences, motivation, emotion, perception, learning, methodology, test and measurement, history, abnormal, physiology and applied psychology. This course emphasizes lectures, multimedia presentations, discussions and experimentation.

Upon successful completion of PSY 100, the student should be able to:

1. Identify the concepts, language, and major theories of the discipline to account for psychological phenomena.
2. Compare and contrast the major perspectives of psychology: behavioral, neuroscience, cognitive, evolutionary, humanistic, psychodynamic, and sociocultural.
3. Apply psychological concepts, theories, and research findings as these relate to everyday life.

**PSY 170 Psychology of Adjustment (3) KCC AA/DS and KCC AS/SS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100; **and** qualification for MATH 82 **or** qualification for a higher-level mathematics course.*

*Comment: PSY 170 may not be substituted for the PSY 100 prerequisite for 200-level PSY courses.*

PSY 170 explores the application of psychology to the understanding, management, and enhancement of one's life.

Upon successful completion of PSY 170, the student should be able to:

1. Formulate a concept of self through the exploration of self, personal values, behaviors, beliefs, and goals.
2. Identify normal and abnormal coping strategies.
3. Define and distinguish between the different roles one must take to live a responsible life within the family, community, and society.
4. Demonstrate interpersonal skills such as empathy and active listening.

**PSY 212 Survey of Research Methods (3)**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PSY 100; **and** qualification for ENG 100 **or** qualification for ESL 100; **and** qualification for MATH 82 **or** higher.*

PSY 212 provides an overview of research design strategies used in psychological research. It covers the basic descriptive statistics and concepts within inferential statistics that are necessary for appreciation and comprehension of research findings. The course presents the student with the fundamentals of research that all psychology majors should know. Emphasis is placed on the critical evaluation of psychological research.

Upon successful completion of PSY 212, the student should be able to:

1. Explain the uses of descriptive statistics.
2. Generate descriptive statistics from a given data set.
3. Explain the uses of inferential statistics.
4. Use a statistical computer software program to perform simple analyses such as t tests and chi square tests.
5. Differentiate between basic research designs and the different types of evidence that are obtained from different methods.
6. Critically analyze psychological literature.
7. Express ideas and opinions clearly, both orally and in writing.

**PSY 225 Statistical Techniques (3) KCC AA/DS**

*3 hours lecture per week*

*Prerequisite(s): Qualification for ENG 100 or ESL 100; and qualification for MATH 100 or higher; and a grade of "C" or higher in PSY 100 or consent of the instructor. Comment: The PSY 225 course includes computer-aided instruction. SOCS 225 will no longer be taught beginning in Fall 2024 and will be replaced by PSY 225, Statistical Techniques, for all program requirements.*

PSY 225 uses statistical reasoning in the analysis of social science data. Topics covered include descriptive statistics, probability, parameter estimation, hypothesis testing, tests for independent and dependent measures, analysis of variance, correlation and regression, and nonparametric statistical tests.

Upon successful completion of PSY 225, the student should be able to:

1. Organize, summarize, and communicate a group of numerical observations using different types of descriptive statistics.
2. Make general estimates about the larger population using different types of inferential statistics.
3. Utilize statistical software to perform statistical tests.

**PSY 230 Introduction to Psychobiology (3) KCC AA/DB**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PSY 100; and qualification for ENG 100 or qualification for ESL 100; and qualification for MATH 82 or qualification for a higher-level mathematics course.*

PSY 230 investigates the relationship between biology, human behavior, and mental processes. This course emphasizes the structure and function of the central nervous system and the ethological analyses of behavior and mental processes.

Upon successful completion of PSY 230, the student should be able to:

1. Define the basic structures, systems, and functions of the central nervous system.
2. Describe how these basic structures, systems, and functions relate to observable behavior.

**PSY 240 Developmental Psychology (3)**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PSY 100; and qualification for ENG 100 or qualification for ESL 100; and qualification for MATH 82 or higher.*

PSY 240 emphasizes the psychological processes underlying development of the person from conception through adulthood.

Upon successful completion of PSY 240, the student should be able to:

1. Explain the developmental process from conception through adulthood.
2. Describe and evaluate the various stages of development.
3. Describe and explain the methodology of developmental psychology.

### **PSY 250 Social Psychology (3)**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PSY 100; **and** qualification for ENG 100 or ESL 100; **and** qualification for MATH 82 or higher level mathematics.*

PSY 250 is a survey of major theoretical, practical, and research approaches to the study of how individuals interact with and affect one another in different cultures and environments. Topics include social perception and interactions, individual and group behaviors, beliefs, attitudes, emotions, stereotypes, and decision-making.

Upon successful completion of PSY 250, the student should be able to:

1. Identify, describe, and apply research methods used in the study of social psychology.
2. Describe how different cultures and environments affect social interactions.
3. Evaluate hypothetical or real world situations by applying relevant social psychology research findings.
4. Summarize and critique scientific evidence in social psychology.

### **PSY 260 Psychology of Personality (3)**

*3 hours lecture per week*

*Prerequisite(s): PSY 100; **and** qualification for ENG 100 or qualification for ESL 100; **and** qualification for MATH 82 or qualification for a higher-level mathematics course.*

PSY 260 is a survey of major theoretical approaches to the scientific study of personality. Topics include development, assessment, change, and cultural-social determinants. Current research issues are emphasized.

Upon successful completion of PSY 260, the student should be able to:

1. Compare and contrast the basic theoretical approaches to personality, including their corresponding view of development, change, and assessment.
2. Distinguish between the various methodological approaches to personality research.
3. Assess the strength of research findings within a given research perspective.

### **PSY 270 Introduction to Clinical Psychology (3)**

*3 hours lecture per week*

*Prerequisite(s): A grade of "C" or higher in PSY 100; **and** qualification for ENG 100 or qualification for ESL 100; **and** qualification for MATH 82 or higher.*



PSY 270 surveys ethical issues, research methods, clinical assessment, and types of psychotherapy in clinical psychology.

Upon successful completion of PSY 270, the student should be able to:

1. Explain ethical behavior in clinical psychology.
2. Identify and explain basic clinical assessment.
3. Describe the major approaches to psychotherapy.