

**JEFFERSON COLLEGE**

**COURSE SYLLABUS**

**OTA 232**

**ENVIRONMENTS AND ASSISTIVE TECHNOLOGY**

4 Credit Hours

Prepared by:

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## OTA232 Environments and Assistive Technology

### I. CATALOGUE DESCRIPTION

- A. Prerequisite: OTA130 Psychosocial Occupational Therapy, OTA131 Psychosocial Performance Skills, OTA140 Professional Practice and Management II and OTA145 Applied Neurology all require a grade of “C” or better, with successful completion of OTA150 Level I Fieldwork A, and reading proficiency.
- B. 4 semester credit hours
- C. Description - Environments and Assistive Technology, focuses on understanding the concept of disability as a result of environmental and technological barriers. The course includes fundamentals of adaptive equipment, wheel chair seating and positioning, ergonomic interventions, environmental controls, leisure equipment, and adapted driving. Students will explore the relationship and fit between the person and their environment, in a variety of areas: in-home, school, workplace, and the community. Students will apply knowledge of accessibility solutions in the home and community, to enhance occupational performance across the life span. (S)

### II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES (With numbers in parentheses referring to ACOTE standards)

Expected Learning Outcomes	Assessment Measures
Describe the role of OT practitioners in providing a global, occupation based perspective encompassing technology and environmental use and delivery. (B.1.6, B.1.8, B.4.5, B.6.2, B.7.5, B.9.2, B.9.3, B.9.5, B.9.7, B.9.13)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Identify when to refer clients to appropriate professionals for technology and environmental resources when the services the client needs or seeks are beyond the scope of practice or competency level of the practitioner. (B.4.9, B.5.20, B.5.22, B.5.25, B.5.26)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Identify architectural and technology barriers and recommend adaptations in the home and public areas. (B.2.7, B. 5.2, B.5.5, B.5.9, B.5.17, B.5.23)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Investigate and discuss mechanisms, regulations, and policies regarding delivery and funding/reimbursement of basic OT and technology and environmental applications. (B.7.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Identify informational resources on specialized or complex technology and environmental applications. ( B.5.2, B.5.10, B.8.2)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination

Apply major theoretical models and the OT Practice Framework as they relate to contexts and environmental factors that influence performance. ( B.2.11, B.3.1, B.3.2)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Evaluate a client's occupational and participation needs in areas of instrumental activities of daily living, education, work, play, leisure, social participation, and environmental applications to support those needs. (B.4.1, B.4.2, B.4.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Evaluate the client's contexts, including cultural, virtual, temporal and environmental (physical, social) for their influence on technology and environmental access, application, and use. (B.2.9, B.4.1, B.4.2, B.4.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Evaluate and analyze the activity demands, the client's performance skills, performance patterns, and client factors across contexts of potential environmental use, including transitions between contexts. ( B.2.7, B.4.1, B.4.2, B.4.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Evaluate basic technology and environmental needs within areas of occupation (e.g., basic and instrumental activities of daily living, work, education, play, leisure, social participation, sleep). ( B.2.7, B.4.1, B.4.2, B.4.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Provide basic interventions that optimize the client's engagement in areas of occupation within the home, work, school, and community contexts and optimize the client's performance skills, performance patterns, and body functions (B.2.10, B.7.1B.5.1-B.5.10, B.5.12-B.5.14, B.5.17-B.5.19, B.5.23, B.5.24, B.5.28)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Examine basic environmental program evaluations and continuous quality improvement initiatives to improve the effectiveness and efficiency of service delivery. (B.7.6, B.8.1, B.8.2, B.8.3, B.9.4)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Document the provision of OT and basic technology and environmental services and solutions for reimbursement including technology and environmental evaluation, interventions, service delivery plans, and outcome measures. (B.4.10, B.5.20, B.5.30., B.5.32, B.7.6, B.8.1)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Understand and apply technology and environmental-related legislation and policies across the delivery process (e.g., ADA, IDEA, and Technology Act). (B.6.4, B.7.2, B.9.5)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Apply evidence-based research within OT and basic technology and environmental practice. (B.8.1, B.8.2, B.8.3, B.8.7, B.8.8)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Participate in advocacy activities related to technology and environment on an individual case level and at the community level. (B.9.3, B.9.12, B.9.13)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination
Identify resources and competencies needed for ongoing professional development in accessibility issues. (B.8.2, B.8.7, B.9.4, B.9.5, B.9.6, B.9.7, B.9.8)	Class Discussion/Activity Formative Assessment Written Project/Paper Summative Examination

### III. OUTLINE OF TOPICS

- A. The Environment: Paradigms of Health and Views of the Environment
- B. Environment and Occupational Performance
- C. Changing Institutional Environments
  - 1. The Social Model of Disability
  - 2. Institutional Environments
  - 3. The Study
  - 4. Societal Institutions and Practice
  - 5. Applications for Change
- D. Universal Design & Ecology of Human Performance
- E. Supportive Work Environment
- F. Supported Play & Education Environments
- G. Accessible Transportation
- H. Environments for People with Dementia
- I. Home Modification
  - 1. Evaluating the Client and Environment
  - 2. Developing and Implementing the Plan
  - 3. Moving the Profession Forward
- J. Matching Consumers with Appropriate Assistive Technologies
- K. Human Factors and Environmental Access
- L. Service Delivery in Assistive Technology
- M. Outcomes and Performance Monitoring
- N. Funding and Public Policy
- O. Integrated Systems & Environmental Control
- P. Adaptive Aids for Accessing Technology
- Q. Augmentative and Alternative Communication
- R. Seating Intervention and Postural Control
- S. Computer Access and Information Technologies

T. Driver Evaluation and Vehicle Modification

U. Recreation and Play Environments

#### IV. METHOD(S) OF INSTRUCTION

A. Lecture

B. Readings from textbook

C. Supplemental handouts

D. Classroom activities

E. Participation in games, offsite activities, service learning, and internet-based activities

F. Peer interactive activities, group projects, and discussions in classroom and online

#### V. REQUIRED TEXTBOOKS

A. Christenson, M., & Chase, D. (Current Edition). *Occupational Therapy and Home Modifications: Promoting Safety and Supporting Participation*. Bethesda, MD: AOTA Press

B. Letts, L., Rigby, P., & Stewart, D. (Current Edition). *Using Environments to Enable Occupational Performance*. Thorofare, NJ: Slack Inc.

C. Olson, D. A., & DeRuyter, F. (Current Edition). *Clinician's guide to assistive technology*. St. Louis, MO: Mosby, Inc.

#### VI. REQUIRED MATERIALS

Course homepage available through Blackboard, computer with internet access (available through the Jefferson College Labs) paper, notebooks, pens, pencils with erasers.

#### VII. SUPPLEMENTAL REFERENCES

A. Class Handouts

B. Current Library Resources

1. Books

- i. Christenson, M., & Chase, C. (2011). *Promoting safety and supporting participation*. Bethesda, MD: AOTA Press.
- ii. Law, M., & MacDermid, J. (Eds.). (2008). *Evidenced based rehabilitation, a guide to practice* (2<sup>nd</sup> ed.). Thorofare, NJ: Slack Inc.

2. Periodicals
3. Videos

C. Current internet resources

1. On-line reference materials
2. Textbook companion web-site and CD
3. American Occupational Therapy Association (AOTA) web-site

VIII. METHOD OF EVALUATION (basis for determining course grade)

- A. Formative Assessment/Written Projects or Papers will equal 20% of total course grade. Consisting of 1-5 assignments focused on application of occupational therapy theory and principles
- B. Summative Examinations – 3-5 examinations worth up to 60%
- C. Attendance/Participation/Classroom Discussion/Activity – grade will equal 10% of total course grade
- D. Additional Credit – Additional activities, community service, or exemplary professional behaviors as assessed by a professional behaviors checklist will equal 10% of total course grade
- E. Grading Scale:  
A = 93-100%  
B = 84-92.9%  
C = 76-83.9%  
D = 66-75.9%  
F = 0-65.9%

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services located in the library. (Phone: 636-797-3000, ext. 3169.)

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook. Any student who cheats or plagiarizes will be subject to dismissal from the Occupational Therapy Assistant Program and will be referred to the college for disciplinary action. (See College website, <http://www.jeffco.edu>).

#### XI. ATTENDANCE STATEMENT

Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details. Student's grade will also be based on participation in class and attendance.

#### XII. OUTSIDE OF CLASS ACADEMICALLY-RELATED ACTIVITIES

The US Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically-related activities such as reading, studying, and completing assignments. Specifically, time spent on academically-related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.